



This is a digital copy of a book that was preserved for generations on library shelves before it was carefully scanned by Google as part of a project to make the world's books discoverable online.

It has survived long enough for the copyright to expire and the book to enter the public domain. A public domain book is one that was never subject to copyright or whose legal copyright term has expired. Whether a book is in the public domain may vary country to country. Public domain books are our gateways to the past, representing a wealth of history, culture and knowledge that's often difficult to discover.

Marks, notations and other marginalia present in the original volume will appear in this file - a reminder of this book's long journey from the publisher to a library and finally to you.

Usage guidelines

Google is proud to partner with libraries to digitize public domain materials and make them widely accessible. Public domain books belong to the public and we are merely their custodians. Nevertheless, this work is expensive, so in order to keep providing this resource, we have taken steps to prevent abuse by commercial parties, including placing technical restrictions on automated querying.

We also ask that you:

- + *Make non-commercial use of the files* We designed Google Book Search for use by individuals, and we request that you use these files for personal, non-commercial purposes.
- + *Refrain from automated querying* Do not send automated queries of any sort to Google's system: If you are conducting research on machine translation, optical character recognition or other areas where access to a large amount of text is helpful, please contact us. We encourage the use of public domain materials for these purposes and may be able to help.
- + *Maintain attribution* The Google "watermark" you see on each file is essential for informing people about this project and helping them find additional materials through Google Book Search. Please do not remove it.
- + *Keep it legal* Whatever your use, remember that you are responsible for ensuring that what you are doing is legal. Do not assume that just because we believe a book is in the public domain for users in the United States, that the work is also in the public domain for users in other countries. Whether a book is still in copyright varies from country to country, and we can't offer guidance on whether any specific use of any specific book is allowed. Please do not assume that a book's appearance in Google Book Search means it can be used in any manner anywhere in the world. Copyright infringement liability can be quite severe.

About Google Book Search

Google's mission is to organize the world's information and to make it universally accessible and useful. Google Book Search helps readers discover the world's books while helping authors and publishers reach new audiences. You can search through the full text of this book on the web at <http://books.google.com/>

GENERAL LIBRARY
OF
UNIVERSITY OF MICHIGAN

PRESENTED BY

JJ Church

May 23

1909

Generalized
H 610,5

H 77

N15°

S8p

PROCEEDINGS

OF THE

74576

THIRTY-FIRST ANNUAL SESSION

OF THE

HOMEOPATHIC MEDICAL SOCIETY

OF THE

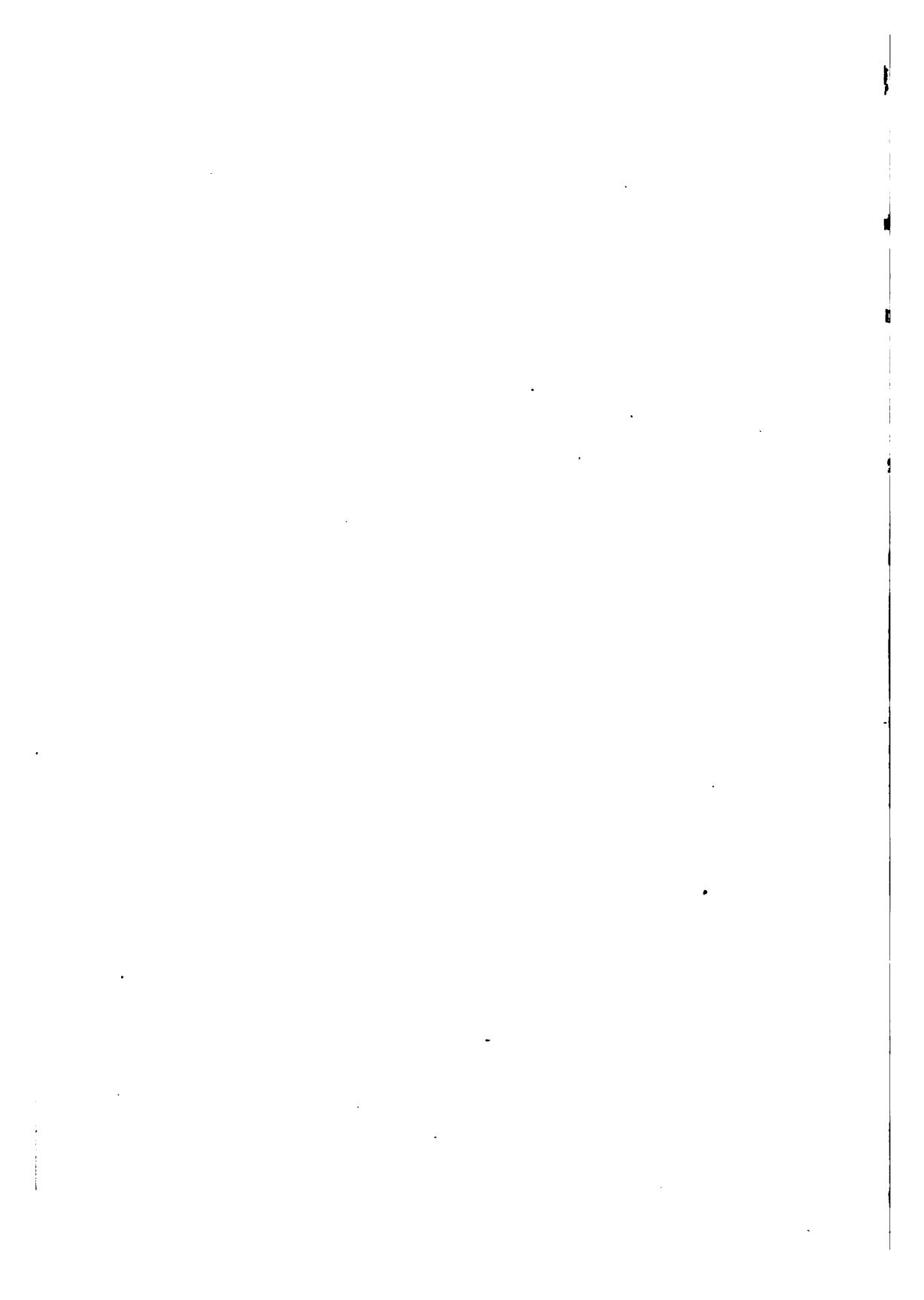
STATE OF OHIO.

HELD IN

CLEVELAND, MAY 14 AND 15, 1895.

EDITED BY THE RETIRING SECRETARY.

CINCINNATI, O.:
ARMSTRONG & FILLMORE,
1895.



To the Members of the Homeopathic Medical Society of Ohio:

We respectfully submit the proceedings of your thirty-first annual session, held in Cleveland, May 14 and 15, 1895.

THOS. M. STEWART, M. D.,

T. T. CHURCH M. D.,

Committee on Publication.

December 1, 1895.

OFFICERS 1894-5.

PRESIDENT—R. B. HOUSE, M. D., Springfield.
FIRST VICE-PRESIDENT—WILLIAM WATTS, M. D., Toledo.
SECOND VICE-PRESIDENT—W. C. HASTINGS, M. D., Van Wert.
SECRETARY—THOMAS M. STEWART, M. D., Cincinnati.
ASSISTANT SECRETARY—FRANK KRAFT, M. D., Cleveland.
TREASURER—T. T. CHURCH, M. D., Salem.
NECROLOGIST—D. H. BECKWITH, M. D., Cleveland.

CENSORS.

H. H. BAXTER, M. D., *Chairman*, Cleveland.
MARTHA A. CANFIELD, M. D., Cleveland.
C. E. WALTON, M. D., Cincinnati.
LAURA C. BRICKLEY, M. D., Harrison.
F. O. HART, M. D., West Unity.
J. H. WHITEHEAD, M. D., Bowling Green.
J. P. HERSHBERGER, M. D., Lancaster.

OFFICERS 1895-6.

PRESIDENT—W. A. PHILLIPS, M. D., Cleveland.
FIRST VICE-PRESIDENT—T. M. STEWART, M. D., Cincinnati.
SECOND VICE-PRESIDENT—EMMA L. BOICE, M. D., Toledo.
SECRETARY—A. C. ROLL, M. D., Toledo.
ASSISTANT SECRETARY—J. C. FAHNESTOCK, M. D., Piqua.
TREASURER—T. T. CHURCH, M. D., Salem.
NECROLOGIST—D. H. BECKWITH, M. D., Cleveland.

CENSORS.

C. E. WALTON, M. D., *Chairman*, Cincinnati.
C. ZBINDEN, M. D., Toledo.
MARY DENNISON, M. D., Toledo.
H. H. BAXTER, M. D., Cleveland.
R. B. CARTER, M. D., Akron.
F. O. HART, M. D., West Unity.
H. POMEROY, M. D., Cleveland.

CONTENTS.

	<small>PAGE.</small>
Call to Order,	9
Address of Welcome—Hon. R. E. McKisson,	10
Response to the Address of Welcome—Wm. Watts, M. D.,	11
Report of the Secretary,	12
Report of the Treasurer,	13
Report of the Committee on Credentials,	16
Annual Presidential Address—R. B. House, M. D.,	17
Report of the Board of Censors,	25
Report of the Auditing Committee,	27
Social Amenities and Banquet,	28
Report of the Committee on the President's Address,	31
Election of Officers,	32
Selection of Next Meeting Place,	32
Resolution—Payment of \$100 to the Hahnemann Mon- ment Fund,	33
" —No member shall appear upon more than one bureau,	35
Appointments 1895-96,	36
Miscellaneous Business,	39
Necrological List,	40
" Report,	41
 REPORT OF THE BUREAU OF MATERIA MEDICA,	27-50
Provings and Practice—W. B. Hinsdale, M. D.,	51
The Nosodes in Tuberculosis—H. C. Allen, M. D.,	52
The Science of Materia Medica Pura—Chas. S. Mack, M. D.,	55
The Morbid Conditions of the Human Organism In- duced by Drugs—Wm. Owens, M. D.,	57
Senega in the Treatment of Coughs—C. S. Ames, M. D.,	77

	PAGE.
Some Confirmations—J. A. Thompson, M. D.,	79
Aconite and Veratrum Viride—A. W. Reddish, M. D.,	85
Aqua Pura—F. C. Steingraver, M. D.,	88
The Treatment of Skin Diseases—G. W. Spencer, M. D.,	97
Rhus Toxicodendron—W. Hoyt, M. D.,	100
Rapid Prescribing—O. S. Allen, M. D.,	103
 REPORT OF THE BUREAU OF SURGERY,	27, 105
The Surgery of the Neck—A. C. Scheble, M. D.,	106
The Significance of Adominal Pain—C. E. Walton, M. D.,	111
Subperiosteal Resection of Bone—J. K. Sanders, M. D.,	114
A New Stitch for the Rectum—T. C. Martin, M. D.,	116
Appendicitis—J. Deetrick, M. D.,	123
Fracture at the Base of the Skull—L. K. Maxwell, M. D.,	130
Deformities and their Treatment—C. E. Sawyer, M. D.,	132
 REPORT OF THE BUREAU OF SANITARY SCIENCE,	30, 136
The Klebs-Loeffler Bacillus—L. D. Meader, M. D.,	137
Sewage Disposal—Chemical Filtration—Josiah Hartzell, C. E.,	144
Sewage Disposal—Intermittent Filtration—W. B. Gerrish, C. E.,	150
 REPORT OF THE BUREAU OF OPHTHALMOLOGY AND OTOLOGY,	31, 153
Ears—Emma L. Boice, M. D.,	154
Tenotomy of the Ocular Muscles in Heterophoria—B. B. Viets, M. D.,	162
Notes on Eye Affections from Children's Diseases—W. A. Phillips, M. D.,	166
An Eye Case of Nasal Reflex Origin—Thos. M. Stewart, M. D.,	168
Two Cases of Anterior Staphyloma and Treatment—H. B. Hills, M. D.,	169

CONTENTS.	PAGE.
REPORT OF THE BUREAU OF LARYNGOLOGY,	32, 172
Papilloma of the Tonsil—Geo. H. Quay, M. D.,	173
A Nose Case—P. T. Kilgour, M. D.,	174
REPORT OF THE BUREAU OF REGISTRATION, LEGISLA- TION, AND STATISTICS,	32, 177
Keep Your Eye on the Target—H. E. Beebe, M. D.,	178
REPORT OF THE BUREAU OF OBSTETRICS,	34, 181
After-pains—G. W. Rhonehouse, M. D.,	182
Cimicifuga Racemosa in Puerperal Conditions—J. C. Sanders, M. D.,	188
The Parturient State—Wm. Watts, M. D.,	190
REPORT OF THE BUREAU OF GYNECOLOGY,	33, 34, 192
The Operative Treatment of Pus Confined to the Pel- vis—James C. Wood, M. D.,	193
The Surgical Treatment of Uterine Fibroids—DeWitt G. Wilcox, M. D.,	208
Physiological Dietetics in the Diseases of Women— H. D. Bishop, M. D.,	218
Curetting—Mary Dennison, M. D.,	224
REPORT OF THE BUREAU OF NEUROLOGY,	34, 228
Nagging—Laura C. Brickley, M. D.,	229
Self-Control and Auto-Hypnotism—J. D. Buck, M. D., .	231
The Treatment of Chorea—J. P. Hershberger, M. D., .	234
Some Pointers in the Treatment of Mental and Nerv- ous Diseases—C. Hoyt, M. D.,	236
REPORT OF THE BUREAU OF CLINICAL MEDICINE,	34, 238
Bronchitis—T. T. Church, M. D.,	239
Mercurius Corrosions in Bright's Disease—H. E. Beebe, M. D.,	243
A Cure of the Morphia Habit by Permanganate of Pot- ash—G. D. Grant, M. D.,	246
Recurrent Measles—L. G. Griste, M. D.,	248

	PAGE.
The Treatment of Pneumonia—J. P. Hershberger, M. D.,	249
An Experience with Two Insane Patients—H. B. Gar- rigues, M. D.,	250
 REPORT OF THE BUREAU OF PAEDOLOGY,	34, 35, 256
The Diagnostic and Therapeutic Value of the Stools in Infants—W. C. Hastings, M. D.,	257
Infantile Fevers—S. R. Geiser, M. D.,	262
The Throat and Nose in Scarlet Fever—W. A. Geo- hegan, M. D.,	266
The Care of the New Born with Especial Reference to Dress—Laura C. Brickley, M. D.,	270
Preventable Chest Lesions in Children—T. C. Duncan, M. D.,	272
Acute Milk Infection—Stella M. Clark, M. D.,	273
 REPORT OF THE BUREAU OF ANATOMY,	35, 284
The Prostate Gland—A. C. Roll, M. D.,	285
 Constitution,	289
By-Laws,	290
Standing Resolutions,	291
Officers Since Organization,	292
Directory of Members,	297

PROCEEDINGS
OF THE
THIRTY-FIRST ANNUAL SESSION
OF THE
Homeopathic Medical Society of Ohio.

MINUTES.

First Day—Morning Session—Tuesday, 9:30 a. m.

The thirty-first annual session of the Homeopathic Medical Society of the State of Ohio, was opened in the Masonic Temple Building, corner of Superior and Bond streets, Cleveland, beginning promptly at 9:30 o'clock, May 14, 1895.

Dr. R. B. House, of Springfield, President, called the assembled physicians to order, and, after briefly stating the purpose of the meeting, invited the Rev. Dean Williams to invoke the Divine blessing.

Following this order, the President introduced Hon. R. E. McKisson, Mayor, who spoke as follows:

Mr. President and Gentlemen of the Ohio Homeopathic Medical Society:

The presence, in annual session, of an honorable society such as yours, I need hardly say, is a compliment which the people of Cleveland highly appreciate. If the old custom of presenting the keys of the city to its guests were still an essential feature of municipal hospitality, I do not know of any to whom the honor could be conferred with more confidence or a greater assurance of safety than to the gentlemen of the medical profession.

But it is not necessary to present you with the keys to the city. You have them already. We have taken the men of your profession into our homes, which means that you have been taken into our hearts also. Your duties are at once the most sacred and most confidential which fall to any of the professions. In a very true sense, you hold already the keys, not merely of the city, but of the public health—yes, even of life and death. What more can we give you? Our acts have already spoken our confidence and esteem. It only remains to add the welcoming word, and a very cordial word it is.

We have learned to speak of the progress of medicine in recent years almost as if it were commonplace. So much that is new has arisen that the world hardly appreciates how great the gap is between the present and the past. The invention of more perfect instruments to test the faculties and sound the depths of weakness and strength, the discovery of new remedies, the application of methods that are not only new, but revolutionary in their theory and efficacy, and, above all, the wonders of modern surgical skill have combined to give us poor lay mortals the impression that you gentlemen of medicine can do almost anything.

A century ago, when Hahnemann first became convinced of the value of the great principle of "similia, similibus, curantur," many things which are daily done by you would have been looked upon as miracles. It is the old story of progress, the miracles of yesterday are the commonplaces of to-day.

It is gratifying to feel that new ideas and better practices are more readily accepted now than when Hahnemann first began his long battle for recognition. It is true there is still prejudice and jealousy and quibblings, but the great public, whose judgment in the end must be final, is far more intelligent and far more easily reached than was possible before the day of the public school, the telegraph, and the daily newspaper.

There are many facts in the life and struggles of the founder of the homeopathic school of medicine that are wonderfully interesting, but to me no incident appeals more strongly than that at

Coethen, forty years after he first declared the similia principle. It is a dramatic incident.

The man who, for more than a third of a century, had battled for the principle he believed to be wise and essential to his science, had made his home in Coethen. You remember what followed. How gradually, under the touch of his skill, prejudice disappeared. How he came to be revered and esteemed by the towns-people, until, when he decided to leave and make Paris the home of his old age, the man of three-score and ten was compelled to steal away by night like a thief, lest his patients should arise and insist upon detaining him by force.

We have all heard of medical men running after patients, and some of us may even have heard of some of those who were compelled to leave their places of residence between night and morning, but this, I take it, is the only instance where a physician had to leave by stealth lest his patients refuse to let him go at all. Whatever contrary people had to say about Hahnemann, I always felt he was a great man after reading that story. It takes a great physician to be able to escape his patients so successfully.

But, gentlemen, I came merely to say a word of welcome, not to discuss principles. It is a great pleasure to me to bid you a hearty welcome to Cleveland. I trust the thirty-first annual meeting of your society may be successful beyond your fondest expectations, and I am sure both your brethren and the people of our hospitable city will be glad to have you return.

The Mayor's address was listened to with rapt attention, and when he had concluded, the physicians present applauded him to the echo. After order had been restored, Vice-President Watts, of Toledo, on behalf of the society, responded as follows:

THE VICE-PRESIDENT'S ADDRESS.

In the name of the Homeopathic Medical Society of Ohio we accept the welcome so graciously extended by the honorable Mayor and physicians and citizens of Cleveland—the Forest City—the beautiful, the magnificent city of the lakes, the home of brainy men and beautiful women, the home of wealth, the home of art; of eloquent speakers and skillful surgeons; of leading politicians and successful physicians; of brilliant lecturers and eminent specialists; the one city of my envy, of which I would say, were I not of Toledo I would I were of Cleveland.

We accept as graciously as the welcome was extended, and

promise to behave ourselves as nicely as may be, and as we are usually welcome in our various visits, it is no more than we expected, and we intend to accept and use our welcome to the fullest.

So if you have anything especially enjoyable we want you to understand we are ready and willing to drain the enjoyment to the veriest dregs, and you cannot find any enjoyment too pleasant, for we are acclimated to such treatment, and we are prepared to take it in heroic doses, often repeated.

You will find us here as at home prepared for any emergency presented, and ready for a feast of the soul or a feast of the body; in the front ranks of fun or the front ranks of work, loaded, primed, prepared for the perils of war or the pleasures of peace—loaded for our enemies, primed for our friends, and prepared for everything.

We will discuss with equal equanimity a mooted point in surgery or a natural joint of a turkey. With equal pleasure we will fracture the fad of a crank or the neck of a bottle. We are glad to be here, and pleased to know we are welcome.

We are here for one purpose—the mutual benefit of all, and though each and every one may have different methods of working out this object, we will discuss them all, accept those considered good, and without prejudice dismiss those thought otherwise. We are here to teach and be taught. We are here to learn better methods of relieving the sick and the afflicted.

We are to know how to move promptly, relieve pain and suffering, to extend the life of man, and work for the good of mankind. The field is open. And now, gentlemen, a season of work and a season of play. Work with our entire strength and mind, and play with equal vigor. Again, Mr. Mayor, we thank you.

At this point the Secretary presented the minutes of the latest session of this society by calling attention to the published transactions, which every member in good standing had already received, and was, therefore, familiar with the minutes. He suggested that this printed volume be accepted as his report of the minutes. Upon motion duly seconded the same were adopted.

In addition, the Secretary presented the following report:

SECRETARY'S REPORT.

To the Homeopathic Medical Society of Ohio:

The Secretary of this society reports a total registration of 75 members in attendance at the latest meeting held one year ago in

Toledo. At that meeting 20 new members were admitted. The total membership to date is 271, including in this enumeration the honorary, non-resident, and active members.

800 notices of the meeting in Cleveland have been mailed to the physicians of the State, to the journals, and leading State newspapers.

There is need of missionary work on the part of our members, and they should, during the year, help to increase our membership by talking up our society to their friends in the profession.

The proceedings have been published after the usual delay incident to getting the return of papers sent to journals. We think the work and price compare favorably with other years.

The expenses of the Secretary's office for the current year have been for postal cards, printing, and mailing circulars and programs, \$42.52, voucher herewith presented.

On account of the clerical work involved with the duties of the office, and having served to the best of our ability in the capacity of secretary for four consecutive years, the present incumbent takes this opportunity to announce that after the conclusion of the labors incident to this session he will expect to be relieved from further duty in this direction.

With thanks for the uniform support given by the society, I am, with respect,

THOS. M. STEWART, Secretary.

The Committee on Credentials was appointed as follows: Drs. W. T. Miller, A. E. Scheble and G. W. Rhonehouse.

The Treasurer, Dr. T. T. Church, of Salem, presented the following report, which, upon motion duly seconded, was accepted:

REPORT OF TREASURER.

Mr. President and Members:

In addition to giving a statement of the finances, it has seemed to me necessary to make some report of the work done during the past year.

I thought I knew a year ago that the Treasurer had work to do, but I now know that I did not know much of anything then about the amount required.

The books came into my possession the latter part of July. Early in August a notice was sent to each member in arrears, stating the amount of the indebtedness and asking for a prompt remittance. Beginning in September, drafts were presented through

the banks to those who had paid no attention to the notices. After mailing the transactions to members entitled to receive them, a final request to pay was sent to those who had not responded to either the first notice or the drafts.

Some of these methods did not meet with the approval of all the members and I received several lectures as to how a treasurer should attend to his business.

While sending out the notices I was struck by the difference in the list of members as printed in the transactions and that in the ledger, and began to compare them to discover what was wrong, and learned that the list in the transactions had not been corrected to correspond with the list in the ledger, as I then found some names that had been carried for years in public after they had been dropped in private. Also, I discovered that during the years 1890, 1891 and 1892, eighteen physicians had been elected to membership who have never paid even the initiation fee, and one of these names appeared twice, having been elected in 1890 and again in 1892.

I wrote to each of these physicians, enclosing statement of amount due, and asked their pleasure regarding it. I received several replies, one coming from the distant State of California, and they all agreed in one thing—this was the first time they had ever heard they were considered members of the society.

In addition to his surprise at being supposed to be a member, one gentleman asked me if there was a certain bureau in the society, as he had much interest in that particular line of work. Picking up an old copy of transactions, I found his name as a member of the particular bureau about which he had inquired.

As these doctors have never paid the initiation fee, it is only right that their names should be dropped and they be asked to apply for membership in the regular way.

As a matter of interest to the society I give these names:

B. J. Barbee,	1891	C. I. L. Motley,	1891
Mary J. Booth,	1890	Wm. Patterson,	1891
W. N. Boyer,	1892	F. A. Reed,	1890
D. H. Crawford,	1891	Thos. Ryall,	1890
A. C. Graham,	1891	G. W. Spencer,	1890
Orra A. Hausch,	1891	Frank W. Stewart,	1891
F. C. Lee,	1891	F. Ernst Stoaks,	1891
G. A. Light,	1892	Chas. B. Thomas,	1891
S. D. McClute,	1891	John E. White,	1891

During the year four of our number have died: Drs. Dake, Hall, Schneider and Webster.

Two have resigned: Drs. Julia M. Goodwin and M. Belle Linkmyer.

Five members have strayed or been lost, and any information as to their present location will be thankfully received.

Dr. J. E. Brainard, formerly of Perrysburg, reported "gone to Nebraska."

Dr. Morton M. Eaton, formerly of Cincinnati, reported "gone to St. Louis."

The transactions sent to Drs. E. A. Darby, Mt. Vernon, W. S. Jackson, Bucyrus, and F. H. Rorick, Chicago, have been returned with no new address.

Our present membership consists of 188 members who have paid up in full, 23 who have removed from the State, 10 honorary members, 7 who are in arrears one year, 25 two years, and 23 three years. One member has paid his dues for two years and a half in advance.

The following twenty names are in arrears four years or more. They have all refused the drafts made upon them, and have been notified of the standing resolution, which drops their names from the list:

A. G. Bailey,	C. A. Howell,
A. F. Baldinger,	B. S. Hunt,
H. V. Beardsley,	A. A. Lovett,
G. G. Biggar,	J. O. Morrow,
A. C. Buell,	J. W. Rockwell,
E. H. Butman,	C. A. Stedman,
C. N. Cooper,	Ellen M. Throop,
Ira W. Disbro,	R. D. Tipple,
George A. Frasch,	Alice M. Tracy,
John R. Gleason,	A. F. Worthington.

I have but one comment to make on this report. Our list of members in good standing, living in the State of Ohio, is less than the number of homeopathic physicians credited to the City of Cleveland alone. Two queries naturally arise, why is this thus, and what can we do to make our society greater in numbers and influence?

I suggest that each member resolve himself into a soliciting committee of one, and at our next meeting report at least one applicant for membership.

After this lengthy preliminary, the financial report is as follows:

To Balance on hand, May 8, 1894.....	\$ 34 24
To Collections from Fees and Dues, by Dr. House. <u>192 00</u>	
Total Receipts.....	\$226 24
By Bill of Dr. H. E. Beebe.....	\$ 14 75
By Bill of Dr. Thos. M. Stewart.....	42 54
By Bill of Dr. A. C. Roll.....	20 00
By Sundries, Dr. R. B. House	1 00
Total Expenditures.....	\$ 78 29
Balance in hands of Dr. House.....	<u>147 95</u>
To Cash received from Dr. House.....	\$147 95
To Collections from Dues.....	<u>302 00</u>
Total Receipts.....	\$449 95
By Armstrong & Fillmore, Printing and Stationery.	\$272 50
By T. J. Walton, Printing and Stationery.....	10 85
By J. McMillan, Stationery.....	1 75
By Freight and Drayage.....	1 50
By Treasurer, Postage, Overdrafts and Sundries...	33 90
Total Expenditures	<u>\$320 50</u>
Balance on hand.....	<u>\$129 45</u>

Respectfully submitted,

T. T. CHURCH, *Treasurer.*

The President appointed the following as an auditing committee: Drs. D. H. Beckwith, Wm. Watts and Geo. D. Grant.

The Committee on Credentials reported as follows the names of the societies, institutions and colleges represented by delegates in attendance:

Homeopathic Med. Society of N. E. Ohio—R. B. Johnson, M. D.
 Pulte Medical College of Cincinnati—T. M. Stewart, M. D.,
 C. E. Walton, M.D.
 Miami Valley Medical Society (late Montgomery County)—J. C.
 Fahnestock, M. D.
 Cincinnati Homeopathic Lyceum—W. A. Geohegan, M. D.,
 Laura C. Brickley, M. D.
 Cincinnati Homeopathic Free Dispensary—S. R. Geiser, M. D.
 L. D. Meader, M. D.
 N. W. Homeopathic Medical Society of Ohio—G. W. Rhone-
 house, M. D.

Cleveland Med. College—B. B. Viets, M. D., H. H. Baxter, M. D.
Homeopathic Hospital College of Cleveland—W. B. Hinsdale,
M. D., W. A. Phillips, M. D.

Cleveland Academy of Medicine—T. C. Martin, M. D., H. H.
Baxter, M. D.

Round Table Club of Cleveland.

The President called the Vice-President to the chair, and delivered his annual address, as follows:

PRESIDENT'S ADDRESS.

Members of the Homeopathic Medical Society of the State of Ohio:

It becomes my very pleasant duty, as well as my great pleasure, to welcome you to this assembling of the thirty-first annual session of this great and flourishing medical society.

Almost one-third of a century has passed away since this society was organized. Some of you who are present to-day were present at its first session, but many whose hearty hand-shake and cordial greeting in the by-gone days are to you a pleasant memory have given place to another generation, and in a few years more the Homeopathic Medical Society of the State of Ohio will be but the bequest of its founders.

But though "men may come and men may go," yet our principles remain unchanged, and truth lives on forever. Our cornerstone of principles has been hewn out of observation and experience, and is measured by our knowledge of drug pathogenesy. It may be impossible for us to demonstrate the absolute correctness of the law of similars, but that may not be so much the fault of the law itself as our failure of an intelligent interpretation and application of it.

In nature we find a harmonious law pervading all things, and it is reasonable that we should possess a law governing the application of therapeutics. But in the possession of that law we ought to be guarded that we do not allow ourselves to become so narrow and bigoted as not to admit that there may exist something of merit outside of our interpretation of that law. We must bear in mind that far too often orthodoxy is my doxy, and heterodoxy is

the other fellow's doxy. Believing in a law, or at least professing so to believe, we do violence to our honest convictions if we fail of an intelligent observance and practice of that law so far as is possible, but at the same time we would discredit that broadness of character and liberality of thought which every intelligent physician should possess, if we do not as thoroughly and honestly investigate the claims of any other therapeutic law or hypothesis. It is true that in these later days homeopaths are prone to give too much attention to the mechanical departments of medicine, and not enough to our *materia medica*. Last year, while in session at Toledo, a strong effort was put forth by my immediate predecessor in office, and promptly supported by the membership present, to make this, the Cleveland meeting, a special *materia medica* occasion, one in which every bureau should give its best thought and endeavor to the inculcating of the *materia medica* lesson.

A first view of the generous program prepared by your indefatigable Secretary and the bureau chairmen, will disclose the fact that some unusual activity has been called into play in order to carry out the wishes of the society in general, and as voiced by a resolution offered by Dr. Chas. E. Walton. From this cursory view of the program alone it is fair to assume that the hopes of the friends of the homeopathic *materia medica* are not doomed to disappointment, nor that the symposium presented especially by the *materia medica* department will fail of abundant material. Therefore, in a personal and deeply interested way, I wish to express my satisfaction with the efforts made by the last session of this society to cause this assembling of the Ohio homeopaths to be a *materia medica* session par excellence. It is a lamentable fact that in these latter years of our homeopathic prosperity, the tendency has been to ignore the primitive stepping-stones, the lowly and humble born, the apparently trite and insignificant *materia medica*. Years ago while we were yet without colleges and books, save as these latter came to us from abroad, and in a foreign tongue; when we had neither hospital nor dispensary; when surgery in all schools was a very much restricted art, and its more brilliant offshoot, gynecology, not known, our forefathers were dependent entirely upon the *materia medica*, however crude, incomplete, and unsatisfactory, it

would now be voted for the marked success that attended their administrations at the bedside. We are filled with astonishment and admiration as we recall the story of what our fathers in homeopathy accomplished. It is a matter of personal experience to some of the older brethren of this society that it was through heroic effort, calm and patient endurance of ostracism, calumny, and abuse, and the blazing the way through the black forest of ignorance and medical prejudice that homeopathy gained its foothold. And it is further known to be a demonstrable fact that it was *materia medica*, plain, unvarnished, unmixed *materia medica*, which wrought this wonderful change; so that to-day instead of being a term of reproach to be called a homeopathic doctor, it has come to be like the term Christian, which was first applied as a term of derision, the proud designation of a distinct and very powerful school of medicine. We should review these earlier periods occasionally, and refresh our flagging enthusiasm at the spring which caused those earlier pioneers to hazard reputation and fortune, if not life itself, in their zeal for the implantation of homeopathy upon this continent. It is well to remember that without *materia medica* homeopathy would be as naught, that the brilliant operations of surgery, and gynecology, and allied arts have but little to do with homeopathy as of itself, seeing that they are equally brilliant and successful in the other schools of medicine; that upon these homeopathy could not, and cannot even at this time build for permanency; that it is *materia medica* and therapeutics, that great boon to suffering humanity—discovered and classified by Hahnemann and put within the reach of all that has made us great and prosperous, and given us a perpetual lease of life; that homeopathy proper is not dependent upon the whims and fads of the current generation, but being builded upon a rock will outlive man himself.

It may not sound so grandly, nor pay so largely to cure fevers, and colds, and diarrheas, and little things like these, yet it is in the success attending the treatment of these apparently minor and non-surgical ailments, that the medical practitioner must gain his foothold before he can become famous in the more mechanical branches. To every lover of his profession and of his school, the growing tendency within the past few years to a more careful in-

vestigation of the best methods of prescribing, and to a more thorough and comprehensive understanding of our *materia medica* must bring both pleasure and satisfaction. Our colleges, too, are alive to this growing demand for a better and more thorough teaching of *materia medica*, and those of our colleges, which are acknowledged to occupy the front rank of medical progress and education, and which are the peers of any medical schools of our country, are those whose students are thoroughly drilled, not only in the brilliant operative branches, but also in the basic elements of homeopathic medication. So that to-day homeopathy is taking first rank because of its purity and painstaking application.

The American Institute of Homeopathy, our great parent society, last year at Denver had a *materia medica* revival, led by one of our members, which has produced renewed and widespread interest in the subject, and given rise to an increased study of this most important of all medical subjects. The literature of the day, the journals of the schools, the books published within the year past, all show a decided step in the direction of a better knowledge and application of homeopathic *materia medica*. The daily press no longer lends its columns to burlesque the homeopathic doctors; in short, the day of homeopathic recognition seems at hand. The progress which homeopathy has made, and the esteem in which it is held, can be no better evidenced at this time than by referring briefly to the recent action of an old school medical society of this city, the Cleveland Medical Society, which, without application or appeal from any member of the homeopathic profession, or any effort on any hand, so far as is known, voluntarily let down the bars and invites homeopaths into full membership. The fact that a subsequent meeting of the same society failed to ratify this resolution, but moved to reconsider this liberal motion and destroyed it, detracts in some part, it is true, from the value of the first action; but it nevertheless shows to a careful reader and student of current medical history, that homeopathy has either become so formidable to the adherents of regular medicine in Cleveland that it cannot longer be safely left out, or else the doctrines of our grand old man, Hahnemann, have at last so worked upon the minds of the younger generation, that they are no longer willing to abide by the non-

sensical quarrels of their elders, but desire to be at one and amity with all the medical world. Viewed, therefore, in either light the victory was, and continues to be, with the homeopaths. The union of medical forces, while temporarily frustrated by a bare majority in the old school society, must come some day and soon. It only awaits the brushing aside of the narrowness and bigotry which prevents the old school from a fair and impartial investigation of the homeopathic law of cure, and the willingness of medical men of every shade of belief to carefully prove all things and hold fast to that which is good. In the meanwhile the homeopaths may rest upon the triumph which attends the honest administration of their distinctive therapeutics, content calmly to await the future. Our golden age is not in the past, but in the future; not in the origin of our law of cure, but in the consummate flower and fruitage. It is vain, however, to be always looking towards the future and never acting towards it. As Wordsworth says: "Miss not the occasion; by the forelock take that subtle power, the never-halting time, lest a mere moment putting off should make mischance almost as heavy as a crime." As a school of medicine our success in the future, as in the past, will be largely through organization and concerted action. Hence the necessity of making our State society and our local and county societies as efficient and vigorous as possible. Our membership ought to be largely increased. This can be accomplished through personal effort and the allied assistance of our local societies. With a largely increased membership this society would contribute more to the advancement of medical science and the extension of homeopathy throughout the State. We would wield a greater influence in legislation, and in all matters relating to the interests of the medical profession. Let free discussion and friendly criticism characterize our meetings. Let us cultivate the beautiful spirit of helpfulness and kindness in all our fellowship, and ever keeping closely in touch with one another, cement more firmly the fraternal spirit of comradeship, renounce self, and strive for the common good of all.

And while upon this topic of societies, your President deems it not amiss for him to make a suggestion, which may possibly to some seem like gratuitous advice, but which he hastens to assure

you is only offered from the most generous impulses of his heart. There seems to him to be no better way of healing old wounds, and cementing new friendships among the homeopathic physicians of this beautiful Forest City, than by giving it a general homeopathic society that shall be independent of all college or other personal influence, save the greatest good to the greatest number, and shall include all members of the homeopathic profession in Cleveland. With an organization of this nature flourishing in this city, with its many eminent physicians, surgeons, and teachers, there could be no doubt in the mind of any lover of homeopathy that it would soon become a power in the councils of our general school, as it would in all matters pertaining to our legal welfare here, at Columbus, or elsewhere, as the occasion for concerted and long-continued action becomes manifest.

It is pleasant to meet again in this stronghold of homeopathy. Cleveland has been noted for many years as one of the best of homeopathic cities. Each year some of the graduates from its colleges cast their lot within its boundaries. Each year more converts are made to homeopathy through the instrumentality of its colleges and the resident physicians. Each time we return here as a State society we find the same physicians, save those removed by the relentless hand of death, a little older perhaps, but as bright and filled with as much enthusiasm as ever before.

In closing this possibly over-long address, your President cannot refrain from calling attention to the death of one our most beloved and faithful members, a resident and practitioner for many years of this city, and a holder of many important offices in your gift. I refer to Dr. Nathaniel Schneider. He was your president at one time, and served you faithfully in that as he has in every appointment in life. He was a man of sterling honor and uprightness of character, beloved by all for his fidelity to every trust. It was my pleasure as a student to listen to his first course of lectures, and his earnest endeavor to impart the lessons he sought to teach, and his disinterested friendship for and courteous manner toward all his pupils, are held in loving remembrance to-day. Your necrologist will give you in detail the account of his long and singularly beautiful life and his untimely death, and do him such hon-

ors as is wont to bestow upon those who have fallen by the way-side, still devout and zealous in their allegiance to our great and noble cause.

There are only three or four recommendations that the Chair would suggest.

As there has been no session of our State Legislature since our last meeting, we have been enjoying a breathing spell from this very important subject. We will undoubtedly have plenty to do before we assemble again, and a good, wide-awake committee is needed to look after our interests.

I would recommend that the second article of our Constitution be so changed as to require an applicant for membership in this society to be of *good professional standing*, in addition to the requirements now included in that article. Also that section five of the By-Laws be so revised as to conform approximately at least with the order of business usually observed by this society. As it now stands it is obsolete.

I desire to call your attention to a matter of complaint under the requirements of Section 2 of the By-Laws, and the latter clause of a resolution passed May 12, 1875. The By-Law requires "the payment of annual dues invariably in advance," and the clause of the resolution referred to says, "No member in arrears shall receive a copy of the transactions." By these requirements a member who has paid his dues for the year 1895 cannot receive a copy of the transactions of that year until he has paid his dues for the year 1896. He is, therefore, deprived of a portion of the benefits of membership for the year for which he has paid dues.

The homeopathic school has occupied the front rank on the subject of higher medical education. It has been our aim to make the standard of qualification as high as that of the best medical colleges in this country, and we can, with a just degree of pride, commend our colleges in their requirements for graduation. The States of Montana and Minnesota have recently passed or amended their laws requiring of all graduates of later date than 1898 "attendance upon four courses of medical lectures, in different years, of not less than six months' duration each." The provisions of these acts will, therefore, exclude from practice in those States alumni of 11

schools matriculating students the coming session under the provisions of the three years curricula.

But have we not in a measure, at least while searching for a more thorough and extended course in our colleges, lost sight of the preliminary education we ought to require of students seeking for the degree of Doctor of Medicine? I believe this society ought to place itself upon record against receiving students who have not successfully completed studies equivalent to an academic or high school course. A bill before the present session of the New York Legislature provides that the degree of M. D. shall not be conferred in that State unless the candidate shall have passed a preliminary examination representing in 1898 one year's academic work, in 1899 two year's academic work, and in 1900 a full high school course.

Allow me to present one other matter for your consideration, that of a slight appreciation of the services rendered this society by its Secretary, whose arduous duties are approached by no other officer or member of the society. Having served seven years as secretary of state medical societies, I speak from a personal knowledge of those duties. It falls to his lot to perform much of the detail work necessary to insure a good program and successful meeting of the society.

After our annual meeting has finished its business and adjourned, it then remains for the secretary to secure bids and make a contract for the publication of the transactions. This is followed by the arranging of copy for the printer, proof reading, preparing index and other details, so that his work is only terminated when the books are shipped to the treasurer of the society for distribution.

I would recommend that the actual expenses—railroad fare and hotel bill—of the Secretary be paid out of the funds of the society.

This society has always been sure of a royal welcome when it comes to this city; it feels sure of it now. The preparations all point that way. There seems every reason for believing that the recommendation of my immediate predecessor in office and his supporters will not fail of their fulfillment, and that all will find this to be the banner homeopathic *materia medica* session, one that

will prove a red-letter occasion in the homeopathic annals of the State.

I will close by thanking you for your kindness in elevating me to this high and undeserved honor of President, and I trust in the deliberations of this session that all courtesy and consideration will be extended to one another, and that nothing will occur to mar the pleasure of the session or destroy the unity of our profession and society.

The following Committee on Presidential Address was appointed:

Drs. Baxter, Walton, and Scheble.

During the several sessions of the society the Board of Censors, through its Chairman, Dr. Baxter, reported the following applicants for membership, who, having complied with the requirements of the Constitution and By-Laws, and having been recommended by the Censors, were duly elected to membership:

REPORT OF THE BOARD OF CENSORS.

Carina B. C. Banning, B. S., M. D.,	Willoughby.
	Cleveland University of Medicine and Surgery, 1894.
Edmond P. Banning, M. D.,	Willoughby.
	Cleveland Homeopathic Hospital College, 1892.
W. J. Blackburn, M. D.,	Salem.
	Hahnemann Medical College, Philadelphia, 1891.
R. J. Cummer, M. D.,	Cleveland.
	Cleveland Medical College, 1895.
H. N. Curtis, M. D.,	Marietta.
	Homeopathic Medical College, New York, 1881.
C. B. Forward, M. D.,	Cleveland.
	Cleveland Medical College, 1893.
W. H. Gifford, M. D.,	Cleveland.
	Hahnemann Medical College, Chicago, 1890.
W. M. Gregory, M. D.,	Berea.
	Cleveland Medical College, 1895.
Charles A. Hall, M. D.,	Cleveland.
	Homeopathic Hospital College, 1888.

Jasper G. Keelor, M. D.,	Cincinnati.
	Pulte Medical College, Cincinnati, 1892.
J. H. King, M. D.,	Ashland.
	Cleveland Medical College, 1894.
Katherine Kurt, M. D.,	Akron.
	Hahnemann Medical College, Chicago, 1882.
J. Geo. Layton, M. D.,	Cleveland.
	Cleveland Medical College, 1895.
F. B. Livermore, M. D.,	Cleveland.
	Cleveland University of Medicine and Surgery, 1895.
A. E. McClure, M. D.,	Lakewood.
	Cleveland Medical College, 1892.
W. H. McGranaghan, M. D.,	Youngstown.
	Hahnemann Medical College, Philadelphia, 1876.
Lee Douglas Meader, M. D.,	Cincinnati.
	Pulte Medical College, Cincinnati, 1891.
W. B. Merriam, M. D.,	Cleveland.
	Cleveland University of Medicine and Surgery, 1895.
H. T. Miller, M. D.,	Springfield.
	New York Homeopathic Medical College and Hospital, 1888.
Wilson L. Peters, M. D.,	Nebraska.
	New York Homeopathic Medical College and Hospital, 1890.
P. B. Roper, M. D.,	Cleveland.
	Cleveland Medical College, 1894.
Carl Rust, M. D.,	Wellington.
	Cleveland Homeopathic Hospital College, 1893.
M. M. Scheble, M. D.,	Ashley.
	Cleveland Homeopathic Medical College, 1881.
Adolph B. Schneider, M. D.,	Cleveland.
	Cleveland Medical College, 1894.
P. H. Sigrist, M. D.,	New Philadelphia.
	Cleveland Medical College, 1892.
H. B. Simmons, M. D.,	Bellefontaine.
	Pulte Medical College, Cincinnati, 1894.
Frank W. Somers, M. D.,	Cleveland.
	Cleveland Medical College, 1892.
W. B. Thomas, M. D.,	Cleveland.
	Cleveland Homeopathic Hospital College, 1886.
Frank Webster, M. D.,	Dayton.
	Pulte Medical College, Cincinnati, 1882.

William H. Webster, M. D.,	Dayton.
	Pulte Medical College, Cincinnati, 1894.
Guert E. Wilder, M. D.,	Sandusky.
	University of Michigan, Medical Department, 1891.
Annette T. Winship, M. D.,	Cleveland.
	Boston University School of Medicine, 1882.
Ira L. Wyant, M. D.,	Chester Cross Roads.
	Cleveland University of Medicine and Surgery, 1894.

The Auditing Committee reported, through Dr. Beckwith, having carefully examined the accounts and books of the Treasurer, Dr. T. T. Church, and reported the same to be correct. The report was received and accepted and the committee discharged.

The Bureau of Materia Medica was then called, and through its Chairman, Dr. W. B. Hinsdale, reported the following papers:

"The Nosodes in Tuberculosis," by H. C. Allen, M. D., of Chicago.

"The Science of Materia Medica Pura," by Chas. S. Mack, M. D., of Ann Arbor.

"Morbid Conditions of the Human Organism Induced by Drugs," by Wm. Owens, M. D., of Cincinnati.

"Some Confirmations," by J. A. Thompson, M. D., of McComb.

"Bacillinum," by E. Gillard, M. D., of Sandusky.

"Apis Mellifica," by Henry Snow, M. D., of Cincinnati.

"The Therapeutics of Some Skin Diseases," by G. W. Spencer, M. D., of Cleveland.

"Some Ways of Using the Materia Medica," by O. D. Childs, M. D., of Akron.

"Rhus Toxicodendron," by Wm. Hoyt, M. D., of Hillsboro.

"Aconite and Veratrum," a comparison, by A. W. Reddish, M. D., of Sidney.

"Aqua Pura," by F. C. Steingraver, M. D., of Bluffton.

"Senega in the Treatment of Coughs," by C. S. Ames, M. D., of Ada.

"Provings and Practice," by W. B. Hinsdale, M. D., of Cleveland.

The Bureau of Surgery was then called, with Dr. A. E. Scheble, of Toledo, in the chair. The following papers were presented:

"Surgery of the Neck," by the Chairman, A. E. Scheble, M. D., of Toledo.

"The Significance of Abdominal Pain," by C. E. Walton, M. D., of Cincinnati.

"Subperiosteal Resection of Bone," by J. Kent Sanders, M. D., of Cleveland.

"After Incision of the Rectum," by T. C. Martin, M. D., of Cleveland.

"Appendicitis," by J. Deetrick, M. D., of Youngstown.

"Fracture at the Base of the Skull," a case, by L. K. Maxwell, M. D., of Toledo.

"Deformities, and their Treatment," by C. E. Sawyer, M. D., of Marion.

Adjourned at 6:30 p. m.

TUESDAY EVENING—BANQUET.

Two hundred members of the Homeopathic Medical Society of Ohio enjoyed the annual banquet, which was spread in the Hollenden main dining-room. The menu was as follows:

MENU.—Consomme, olives, radishes, boiled shad, parisienne potatoes, tenderloin of beef, asparagus, mushroom sauce, croquettes of chicken, green peas.

Punch, dressed lettuce, ice cream, cake, cheese and crackers, coffee.

After the guests had satisfied the cravings of nature, the toastmaster, Dr. H. W. Osborn, in a witty speech, introduced Postmaster Hutchins, who responded to the toast, "The Doctors." During the course of his remarks, Judge Hutchins said:

It was very gratifying to those on the outside to note the harmony which prevails among the doctors of the different schools, and likened it unto the lying down of the lion and the lamb. The difference between the lawyers and the doctors was that the latter got angry with one another in earnest, while the former fought in order to hoodwink their clients. Taken as an expert witness, the idea prevailed among many that he had become a partisan. The doctor was an important factor in lawsuits, but the speaker thought the professional expert witness lost his force and would continue to do so so long as he remained a partisan instead of a scientist. In the opinion of the world, doctors' opportunities were superior to those of the members of the other professions, and the world

was being benefited more through the members of the medical profession than through the work of any other calling.

F. J. Wing, Esq., in responding to "The Patient," said that Marc Anthony declared long ago, "The evil men do lives after them, but the good is often interred with their bones." Perhaps, he remarked, Marc had some reference to the healers of men, perhaps not. In a humorous manner the speaker called attention to the woes and trials of patients, and said it was his belief that there were no patients until there were physicians; that if it weren't for patients there wouldn't be a doctor in the city. "There is one consolation for you homeopathists," said Mr. Wing, "you have less to answer for than the old school, because you interfere with nature less."

He said that law like medicine frequently adopted the principle of *similia similibus curantur*, instancing a case in the far West where a litigant sued another for \$100, money loaned. The claim was fraudulent, but on the trial he produced eight witnesses who swore to having seen the \$100 loaned, whereupon the defendant produced twelve witnesses who swore they had seen the money paid back again. One lie cures another lie.

"The Golden Calf" was the toast to which Rev. J. Z. Tyler responded.

He said that he was very busy yesterday. Two of the things he did was covering up the mistakes of physicians. Mr. Tyler, in speaking of the golden calf of the Old Testament, said that Moses reduced the image to powder, and the powder placed in the water which the people were compelled to drink—the gold cure. That gave those who took the gold cure a long pedigree. The speaker thought that perhaps the subject assigned him had a political significance, and that the doctors wanted him to say whether he was a gold man or a pupil of "Coin's School." He twisted the toast in every conceivable direction until he told the apropos story of the Irishman, who had been in a railroad wreck but not injured. He got out but put his clothes all on wrong side before. Being asked if he was internally injured replied that he thought not, but feared that he was fatally twisted.

Dr. C. E. Walton followed in a short address on "The Lawyer."

He depicted some of the foibles of the barristers, and called attention to the fact that if it were not for the physicians the attorneys would not be in physical condition to defend the rights of

the people. He concluded by telling in his admirable way the story of the lawyer who did three benevolent acts, one being relieving the needs of a poor widow, the second providing for the baptism of her child, and the third in the charitable transaction, getting rid of one of the worst \$20 counterfeit bills he had ever seen.

"And May it be Well With You," by Dr. H. E. Beebe, was the last speaker of the evening.

He spoke at considerable length on what it means to be well, and requested any present who were not well to signify it as there were numerous healers present.

During the evening Miss Nellie Sabin Hyde sang "L'Armour Captif," by Chaminade; "My Heart at thy Sweet Voice," by Saint Saens, and "Haberna," from "Carmen," by Bizlt. Her singing was loudly applauded.

Shortly after midnight the toast-master announced that the festivities were over, and the guests departed.

Second Day—Morning Session—Wednesday, 9:30 a. m.

On re-assembling the following resolutions was proposed but lost:

Resolved, That no application for membership shall be considered by the Board of Censors unless accompanied by the initiation fee and annual dues for the first year.

The Bureau of Sanitary Science was called, and the following papers presented:

"The Diphtheria Epidemic at Ashtabula," by the Chairman, W. T. Miller, M. D., of Cleveland.

"The Klebs-Loeffler Bacillus," with photographs, by L. D. Meader, M. D., of Cincinnati.

"Chemical Precipitation," by Mr. Josiah Hartzell, C. E., member of the State Board of Health.

"Intermittent Filtration," by Mr. W. B. Gerrish, C. E., of Oberlin.

A telegram was received, and read as follows:

Greetings from the medical third house at Lansing. Let's swap prayers. Our installment given when needed.

[Signed.]

A. W. SAXTON,

O. R. LONG,

D. A. MACLACHLAN,

M. P. HUNT.

The Bureau of Ophthalmology and Otology was then called, with Dr. Emma Boice, of Toledo, as Chairman. The following papers were presented:

"Ears," by Emma Boice, M. D., of Toledo.

"Eye Surgery," by B. B. Viets, M. D., of Cleveland.

"A Surgical Case," by G. C. McDermott, M. D., of Cincinnati.

"Eye Troubles Resulting from Children's Diseases," by W. A. Phillips, M. D., of Cleveland.

"Two Cases. Anterior Staphyloma and Treatment," by H. B. Hills, M. D., of Youngstown.

"An Eye Case of Nasal Reflex Origin," T. M. Stewart, M. D., of Cincinnati.

The Committee on President's Address reported as follows:

The Committee on the President's Address beg leave to report that they commend the address as a whole, and in reference to the recommendations suggested would call attention:

1. To the action of the Intercollegiate Committee of the American Institute of Homeopathy, which now contemplates the elevation of the educational standard of the student, by requiring a preliminary examination, such as can be passed only by one who has had the equivalent of a high school education. However, we would recommend to the profession that it is the sense of this society that no physician should send a student to our colleges who has not had an academic or high school course.

2. We endorse the recommendation relating to the additional qualification for membership, and will now give notice that at our next annual meeting we shall move to amend Article 2 of the Constitution by inserting after the word "curantur" the words, "and who is of good professional standing."

3. We move that Section 5 of the By-Laws shall be changed so as to read: "The regular order of business of each meeting shall be arranged by the President and Secretary."

4. We suggest that the interpretation of the Treasurer as to the payment of dues in advance and the furnishing of the transactions

shall conform to the rule that transactions shall be furnished only for the year for which the dues are paid.

Respectfully submitted, CHAS. E. WALTON,
H. H. BAXTER,
A. E. SCHEBLE.

The Bureau of Laryngology was called, and in the absence of the Chairman, Dr. G. H. Quay, of Cleveland, acted as *pro tem.* Chairman, presenting a paper by Dr. P. T. Kilgour, of Cincinnati, on "A Nose Case," and a paper by himself, entitled "Papilloma of the Tonsil."

The Bureau of Registration, Legislation, and Statistics, reported one paper through its Chairman, Dr. H. E. Beebe, of Sidney, entitled "Keep Your Eye on the Target."

The hour having arrived for the election of officers of the society, and the selection of the place of meeting for the next year, the following result was obtained:

W. A. Phillips, M. D., of Cleveland, President.

Thomas M. Stewart, M. D., of Cincinnati, First Vice-President.

Emma L. Boice, M. D., of Toledo, Second Vice-President.

A. C. Roll, M. D., of Toledo, General Secretary.

J. C. Fahnestock, M. D., of Piqua, Assistant Secretary.

T. T. Church, M. D., of Salem, Treasurer.

D. H. Beckwith, M. D., of Cleveland. Necrologist.

BOARD OF CENSORS.

C. F. Walton, M. D., of Cincinnati, Chairman.

Christian Zbinden, of Toledo.

Mary Dennison, M. D., of Toledo.

H. H. Baxter, M. D., of Cleveland.

R. B. Carter, M. D., of Akron,

F. O. Hart, M. D., of West Unity.

H. Pomeroy, M.D., Cleveland

III. FORTRESS, M.D., CLEVELAND.

1911, 11, was selected as the most favorable meeting.

Dr. Walton called attention to the fact that at the last session of the American Institute of Homeopathy at Denver, he had taken

the liberty of subscribing \$100 to the Hahnemann Monument Fund for this State society. He, therefore, suggested and moved that the society contribute from its treasury the sum of \$100 for the Hahnemann Monument Fund, and that the contribution be due and payable in June. Duly seconded.

Dr. Stewart suggested that if the Treasurer can not pay this amount at the time stated, that the publication of the transactions be suspended until the money is raised by subscriptions or otherwise.

Dr. Scheble wants the appointment of a committee.

Dr. Baxter—The Treasurer has money enough now to meet this demand. I would like it understood, however, that if there is any deficiency in the expenses, that a subscription of \$1 per capita be ordered to meet that deficiency.

Dr. Scheble thinks the better way would be to assess the membership pro rata.

Dr. Carter thinks the membership should make it up among themselves.

Dr. Walton, on the other hand, wants this to be an offering from the State society. He accepts Dr. Baxter's amendment.

The President puts the question, and it is declared that the society orders the payment of \$100 towards the Hahnemann Monument Fund, and that in the event of the fund in the treasury being insufficient to meet the necessary expenses, that an assessment be levied upon each member of \$1 each.

It was agreed that when we adjourn we adjourn to meet at 1:30 p. m., standard, and that the Legislation Committee shall have the special order at the opening of the meeting.

Recess till 1:30 p. m.

On re-assembling the Bureau of Gynecology was called, with Dr. J. C. Wood as Chairman.

The following papers were presented, acted on, and referred to the Committee on Publication:

“The Surgical Treatment of Uterine Fibroids,” by DeWitt G. Wilcox, M. D., of Buffalo.

"Three Hysterectomies by the Pratt Method," by E. Gillard, M. D., of Sandusky.

"A Case," by Mary Dennison, M. D., of Toledo.

"Physiological Dietetics in the Treatment of the Diseases of Women," by H. D. Bishop, M. D., of Cleveland.

"A General Talk," by H. F. Biggar, M. D., of Cleveland.

"The Operative Treatment of Pus Within the Pelvis," by J. C. Wood, M. D., of Cleveland.

The Bureau of Obstetrics was called, and presented the following papers, G. W. Rhonehouse, M. D., of Maumee, Chairman:

"Macrotine in Puerperal Conditions," by J. C. Sanders, M. D., of Cleveland.

"After-pains," by G. W. Rhonehouse, M. D., of Maumee.

"Remarks," by Wm. Watts, M. D., of Toledo.

The Bureau of Neurology was then called, and presented the following papers, Laura C. Brickley, M. D., of Harrison, in the chair:

"The Treatment of Chorea," by J. P. Hershberger, M. D., of Lancaster.

"Nagging," by Laura C. Brickley, M. D., of Harrison.

"Self-Control and Auto-Hypnotism," by J. D. Buck, M. D., of Cincinnati.

The Bureau of Clinical Medicine was called, with Chairman T. T. Church, M. D., of Salem. The following papers were presented and accepted and referred to the Committee on Publication:

"A Cure of the Morphia Habit, by Pemanganate of Potash," by G. D. Grant, M. D., of Springfield.

"Bronchitis," by T. T. Church, M. D., of Salem.

"Mercurius Cor. in the Treatment of Bright's Disease," by H. E. Beebe, M. D., of Sidney.

"Recurrent Scarlatina," by L. C. Griste, M. D., of Twinsburg.

"Two Cases of Insanity," by H. B. Garrigues, M. D., of Massillon.

"The Treatment of Pneumonia," by J. P. Hershberger, M. D., of Lancaster.

The Bureau of Paedology called, with W. C. Hastings, M. D., of Van Wert, in the chair. The following papers were read and ordered referred to the Committee on Publication:

"Preventable Chest Lesions in Children," by T. C. Duncan, M. D., of Chicago.

"Acute Milk Infection," by Stella Clark, M. D., of Toledo.

"Infantile Fevers," by S. R. Geiser, M. D., of Cincinnati..

"The Throat and Nose in Scarlet Fever," by W. A. Geohegan, M. D., of Cincinnati.

• "The Care of the Infant with Special Reference to Clothing," by Laura C. Brickley, M. D., of Harrison.

"The Diagnostic and Therapeutic Value of the Stools in Infants," by W. C. Hastings, M. D., of Van Wert.

The Bureau of Anatomy called, with Dr. A. C. Roll, of Toledo, in the chair. The following papers were presented and read and ordered to the Committee on Publication:

"The Prostate Gland," by A. C. Roll, M. D., of Toledo.

This concluded the medical bureaus, and they were ordered closed and the papers, as severally presented with their discussions, ordered to the Publication Committee.

Dr. T. P. Wilson proposed that hereafter no member of this society appear upon more than one bureau, and that if chosen by two or more chairmen, the President and Secretary shall have the authority to strike his name off except upon one bureau. Dr. Baxter is opposed to the resolution. Dr. Beckwith speaks in favor of same. Motion is carried.

Dr. Beckwith reports in relation to his appointment as essayist with topic, "The History of Homeopathy in Ohio," that the work of collecting the necessary data has far exceeded his expectations; that he is not ready to present an incomplete report. On motion, Dr. Beckwith is granted another year in which to arrange the facts and present them at Piqua.

The President then appointed the following Bureaus and Committees :

Bureau Appointments for 1895-6.

REGISTRATION, LEGISLATION, AND STATISTICS.

H. E. Beebe, <i>Chairman</i>	Sidney
Thos. M. Stewart	Cincinnati
C. E. Walton	"
T. T. Church.....	Salem
H. H. Baxter.....	Cleveland
D. H. Beckwith.....	"
R. B. House.....	Springfield
A. E. Scheble.....	Toledo
J. W. Clemmer.....	Columbus
P. H. Sigrist.....	New Philadelphia

MATERIA MEDICA.

Henry Snow, <i>Chairman</i>	Norwood
Wm. Owens	Cincinnati
W. B. Hinsdale.....	Cleveland
H. H. Baxter.....	"
Frank Kraft.....	"
C. R. Coffeen.....	Piqua
J. C. Fahnestock.....	"
J. A. Thompson.....	McComb
A. W. Reddish	Sidney
J. A. Gann.....	Wooster
F. O. Hart.....	West Unity
H. Pomeroy.....	Cleveland
Wm. Murdock.....	Akron

GYNECOLOGY.

J. H. Wilson, <i>Chairman</i>	Bellefontaine
C. E. Walton	Cincinnati
H. F. Biggar.....	Cleveland
J. C. Wood.....	"
H. D. Bishop.....	"
H. E. Beebe.....	Sidney
Mary Dennison	Toledo
M. H. Parmelee.....	"
Wm. Watts	"

OPHTHALMOLOGY AND OTOLOGY.

E. G. Rust, <i>Chairman</i>	Wellington
Thos. M. Stewart.....	Cincinnati
Emma Boice.....	Toledo
R. G. Reed.....	Bellefontaine
W. A. Phillips.....	Cleveland
B. B. Viets.....	"
G. C. McDermott.....	Cincinnati
H. B. Hills.....	Youngstown
J. H. Harvey.....	Toledo
W. B. Croft.....	Medina

LARYNGOLOGY AND RHINOLOGY.

P. T. Kilgour, <i>Chairman</i>	College Hill
Geo. H. Quay.....	Cleveland
G. W. Turrill.....	"
C. A. Dixon.....	Akron
C. H. Strong.....	Toledo

SANITARY SCIENCE.

L. D. Meader, <i>Chairman</i>	Cincinnati
Frank Webster.....	Dayton
W. L. Peters.....	Nebraska
H. C. Houston.....	Urbana
C. F. Ginn.....	Miamisburg
R. B. Carter.....	Akron
W. N. Boyer.....	Franklin
E. Holaday.....	West Elkton

ANATOMY, PHYSIOLOGY, AND PATHOLOGY.

S. J. D. Meade, <i>Chairman</i>	Cincinnati
A. C. Roll.....	Toledo
Wm. Gaylord.....	Sandusky

CLINICAL MEDICINE.

W. A. Geohegan, <i>Chairman</i>	Cincinnati
H. T. Miller.....	Springfield
R. B. Johnson.....	Ravenna
C. Zbinden.....	Toledo
F. C. Steingraver.....	Bluffton
J. P. Hershberger.....	Lancaster
J. T. Carter.....	Akron
A. L. McCormick.....	Cincinnati
J. M. Overpeck.....	Hamilton

NEUROLOGY.

H. D. Champlin, <i>Chairman</i>	Cleveland
Laura Brickley.....	Harrison
J. D. Buck.....	Cincinnati
Chas. Hoyt.....	Chillicothe
J. H. Cook.....	New Carlisle
G. R. Bissell.....	Columbus
Stella Hunt.....	Cincinnati

OBSTETRICS.

J. W. Means, <i>Chairman</i>	Troy
J. W. Clemmer.....	Columbus
Ellen M. Kirk.....	Cincinnati
C. A. Pauly.....	"
J. C. Sanders.....	Cleveland
Julia C. Jump.....	Oberlin
O. D. Childs.....	Akron
W. C. Hastings.....	Van Wert

PAEDOLOGY.

E. J. Wunderlich, <i>Chairman</i>	Cleveland
G. W. Rhonehouse.....	Maumee
G. D. Grant.....	Springfield
C. D. Crank.....	Cincinnati
S. R. Geiser.....	"
Mary J. Booth.....	"
D. H. Beckwith.....	Cleveland

SURGERY.

J. K. Sanders, <i>Chairman</i>	Cleveland
J. Deetrick.....	Youngstown
A. E. Scheble.....	Toledo.
W. E. Wells.....	Cleveland
T. C. Martin.....	"
W. T. Miller.....	"
J. G. Keelor.....	Cincinnati
L. K. Maxwell.....	Toledo

DELEGATES TO OTHER SOCIETIES.

American Institute	C. E. Walton, H. F. Biggar, J. D. Buck
Kentucky Society.....	J. D. Meade, L. D. Meader
Indiana "	R. G. Reed, T. P. Wilson

Miami Valley	C. R. Coffeen
N. E. Ohio Homeopathic Medical Society.....	T. T. Church
N. W. " " " "	G. W. Rhonehouse
Michigan " " "	M. P. Hunt

A resolution of thanks was voted to the retiring President for his excellent presiding and the business-like way in which he conducted the affairs of the Thirty-first Annual Session of the Homeopathic Medical Society of Ohio.

A similar vote of thanks was tendered to Dr. Thomas M. Stewart, the retiring General Secretary, at the conclusion of his four years of service, and his promotion to the office of First Vice-President.

Thanks were also voted to the Cleveland Homeopathic profession for its entertainment of the visiting brethren, and for the general good feeling and courtesy which have been found by all visitors.

Also to the daily press for careful reports of the proceedings.

Also to the janitor of the building for his kindness and ready assistance.

At 5:45 p. m., on motion, the Thirty-first Annual Session of the Homeopathic Medical Society of Ohio was declared adjourned to meet in Piqua, the second Tuesday and Wednesday in May, 1896.

THOMAS M. STEWART, *Secretary.*

REPORT OF THE NECROLOGIST,

D. H. BECKWITH, M. D.,

— AND —

MEMORIAL SERVICE

IN HONOR OF

Deceased Members.

1864. BARNES, LEWIS.	1884. KING, JULIUS.
1864. BECKWITH, E. C.	1864. LODGE, E. A.
1864. BLAIR, A. O.	1867. LUNGREEN, S. S.
1871. BROWN, B. P.	1870. McMAHON, W. R.
1884. CLARK, F. M.	1892. MONROE, H. I.
1883. CLEVELAND, C. L.	1872. MOORE, G. W.
1867. COBURN, S. H.	1868. MORRILL, C. F.
1864. CROPPER, CHAS.	1864. OESTERLIN, CHAS.
1870. DAKE, J. P.	1885. OWENS, WM., JR.
1880. EATON, M. M.	1870. PULTE, J. H.
1871. EHRMAN, BENJ.	1879. RING, HAMILTON.
1872. GAYLORD, E. P.	1872. ROWSEY, W. T.
1885. GOUCHER, E. T.	1865. SCHNEIDER, N.
1871. HAINES, J. W.	1864. SHEPHERD, A. F.
1882. HALE, T. T.	1864. SMITH, G. W.
1890. HALL, S. L.	1885. TAYLOR, F. P.
1882. HARRIS, J. D.	1864. WEBSTER, WM.
1871. HUNT, W. H.	

Memorial Notices of Deceased Members.**WM. WEBSTER, M. D.,**

DAYTON, O.

The first on the death-roll since our meeting in Toledo last year was that of Wm. Webster, M. D., Dayton, Ohio.

In October, 1894, he had an attack of grippe from which he never recovered. Over-work prostrated his strong physical frame, and undue exposure ended his life, while he was in his full manhood.

Dr. Webster was of Welsh descent, and inherited a magnificent physique and strong mental faculties. His father was a physician of considerable reputation, and ranked high among his associates.

Young Webster in early life chose for his future work the profession of his father. He was, therefore, trained in the office and educated in many things that he could not have obtained elsewhere. He learned in early life to love and respect the medical profession. After leaving the common school he took a two years' course in the Ohio Western University, and then entered the Farmer's College, where he graduated in 1848.

Dr. Webster seemed to have been born hopeful and buoyant. His natural amiability made him genial, warm-hearted, and a favorite in the schools that he attended. As he grew to manhood he still carried with him those lovable qualities which endeared him to all his associates. When he became a physician he naturally had warm friends, and his patrons truly loved him.

In the sick room he gave cheer and comfort to all whom it was his mission to serve. He was one of the first members of our State society, and assisted in its organization in 1864; was chosen Vice-President at the first meeting of the Homeopathic Medical Society of Ohio.

In 1867 he was elected Secretary, and in 1869 was unanimously made President. He was the founder of the first medical organ-

He invited a member of the American Is-
tined meeting his old friend ~~as is now~~ who have been ~~in~~ present
in Ohio have been ~~in~~ present
in National meetings.
as active member in the Methodist
as its alliance.
we were both medical students
student. Prof. Storck Rosa, of
studied homeopathy during the
the principles of homeo-
during the princi-
in contact with him.
engaged in contact with him.
engaged, and resolved to
engaged. Dr. Webster
opposite medicine in cholera.
said cause that he resolved

profession has
one of their
children

the great un-
known him
the others. Pv
we a

well-developed frame, his genial face, his, to all apparent, robust constitution. He came to Cleveland in 1890, soon joined this society, and took a high rank among the physicians of Cleveland and vicinity. The Trustees of the Cleveland University of Medicine and Surgery soon became aware of his ability. He received the appointment of Professor of the Principles of Surgery and Diseases of the Nose and Throat. His lectures gave general satisfaction to the class; and, perhaps, no professor in the college was held in higher esteem by the students than Dr. Stanton Hall. His practice was that of a specialist while he was a resident of Cleveland. He was held in high respect by the Trustees and beloved by the Faculty. He received the appointment as one of the building committee when it was proposed to build a new college on Huron street. He gave much of his valuable time to the construction of the building, and the medical profession, as well as the city of Cleveland, are indebted to him for the thorough and complete building which was erected.

After three years residence in Cleveland his old friends and patrons solicited his return to his former field of practice, and made him such flattering inducements that he decided to go. With sorrowful hearts and a God-speed we bade him good-bye, little thinking that it was a parting farewell to a truly good man. The fame which he had earned as a specialist while he was in the State of Ohio, soon spread in and about Fort Chester, N. Y., and a large, lucrative practice was soon established.

I well know that I voice the sentiments of the medical profession not only in this city but throughout the State, when I say that he was loved and held in the highest esteem by all who had the good fortune to know him.

In the social gathering Dr. Hall was a polished and finished gentleman. He was a fine elocutionist, and well versed on all the topics of the day. He was a great reader, and could talk well on medicine, science, history, and all the new advanced ideas of the nineteenth century. He was liberal in his views, and possessed of that broad generosity that always characterizes the true scholar.

In the years 1886 and 1887 he was a student of the Berkshire Medical College, graduated from the New York Homeopathic Med-

ical College in 1875. In the year 1877 he was appointed Health Officer of Fort Chester. At the time of his death he was a member of the Homeopathic Medical Society of Ohio, a member of the West Chester County Society of New York, member of the American Society for the Advancement of Science, and member of the American Institute of Homeopathy.

Dr. Hall may well be termed a good man. He was honest, upright, and prompt, to all the duties assigned to him in and out of the medical profession. He detested deceit, hypocrisy, and never forfeited the respect and good opinion of others.

Long may we remember his genial face, and may we strive to emulate his character.

J. P. DAKE, M. D.

At our session in the year 1870 the Honorary Degree was conferred upon one of the most popular physicians in the United States. A man who had no superior for the love of the good and beautiful, as well as for his profession. He had a loyal heart, a character unblemished, and with willing hands faithfully discharged all trusts in and out of the profession that were assigned to him. He was a devoted admirer of Hahnemann and his teachings. He was a power with his pen, and wielded well and forcibly for over forty years for the cause of homeopathy. At the age of twenty-two he published some articles that were criticised severely by old school medical journals which brought the young man to the front, and placed him in such a position that he had to defend himself. He well defended the principles of homeopathy, and established himself as a clear, concise, and practical writer.

He graduated in the year 1849 at Union College; attended lectures at the Geneva Medical College in 1850, and graduated at the College of Philadelphia in 1852; became associate editor of the *Philadelphia Journal of Homeopathy*, 1863; an associate editor of the *North American Journal of Homeopathy* and of the *United Journal of Homeopathy*.

In 1855 he was requested to give an oration on Hahnemann's birthday in Philadelphia. Subject: "The Philosophy of Homeopathy." This lecture gave him such a reputation that the Trustees of the college elected him to the Chair of Materia Medica. He became a member of the American Institute of Homeopathy in 1852, and was chosen President of that body in 1857. It can be truly said that no other man has done more to sustain and build up our medical societies than Dr. J. P. Dake. Ever present at all its sessions of the American Institute when his health permitted, patients or distance did not prevent his attendance, he watched and worked until the society, from a mere handful of members, has reached its thousands.

In 1860 he wrote and published a domestic work, and in 1871 revised and published a larger edition. For the past quarter of a century his name has appeared in the proceedings of the American Institute as Chairman of some bureau on committee work, a work that was always well and faithfully done.

He was selected by the Institute to revise the *materia medica* with a committee from London, Eng. In 1879 he became a member of the American Public Health Association; in 1876 he received the appointment from the government to serve in the Yellow Fever Commission.

He found time to travel, went twice to Europe, where he spent most of his time among the hospitals. He claimed he owed a debt to his profession, and could only pay it by giving time and money to it. It clearly proved that his theory was correct, for he was able to live for the past few years on the competency he had earned in the practice of medicine in former years.

He was a great student, and always prompt in his obligations. His life was pure and above reproach. As a citizen he occupied many positions of trust, being a member of the Chamber of Commerce, of the Round-Table Club, of the Oak Club Art Association, and the Nashville Historical Society.

In good health he went to Sousa's concert, and amid the lovely and enchanting strains of music death came unheralded and bore his spirit away.

He left a legacy to the profession that none of us can imitate, three sons, good and true to the principles that their father taught them.

Dr. Jabez P. Dake was born at Johnstown, N. Y., April 27, 1827, died at his home in Nashville, Tenn., October 28, 1894.

His affectionate nature craved friendship; his love for his profession sought companionship; his consideration for the younger members in the profession, and his desire to aid them, made him hosts of friends; his desire to see them succeed, to be happy, seemed to come out more and more beautiful year by year. The welfare and success of homeopathy came next to kindred blood. His desire to make them happy, and see them happy, came out more beautiful each coming day, and softer and brighter grew the tints of the sky on the parting day as the spirit left to mingle with the pioneers that have gone. A Hering, a Grey, a Pulte, a Dunningham, and a host of others will welcome him to his eternal home. .

NATHANIEL SCHNEIDER, M. D.

Dr. Nathaniel Schneider is a name most of us love, for he who bore that name had honors won by him that only a few men are born to reach.

He left a legacy to the younger members of this society. He has left you a bright and shining example which addresses itself with peculiar force to the medical student and the rising practitioner, for it tells them that, by industry, perseverance and hard study, there is a path to the highest degree of renown, straight, onward, upward, steady, without change till the goal is reached. A teacher, a writer, a physician and surgeon, a citizen loved and respected. He is ours no longer, except his writings and his force of example.

He was conqueror of death and disease upon many a battle-field; he has fought his last fight. Over-study and over-work for many years, death vanquished him in the final struggle. His splendid surgical operations will live on the pages of History, and in the

hearts and affections of the homeopathic profession of America of all those who knew him.

On November 1, 1839, Nathaniel Schneider was born in a country home near Hamilton, Canada. At the age of eighteen he came to Cuyahoga County and entered the Baldwin University at Berea, remaining about five years, except during the winter months, when he taught district schools to enable him to pursue his studies in the college. In 1862 he came to Cleveland and entered the office of Dr. S. R. Beckwith, doing office work for his board and tuition. Dr. Beckwith was doing a large surgical business in the city, also for the railroads in and about Cleveland, having a private surgical hospital under his care. Young Schneider soon became interested in surgical work and was daily engaged in caring for surgical cases.

As a student he was ever faithful to the interests of the office. If a surgical case required great care and attention Nathaniel was assigned to take charge of it. I never knew his equal as a medical student. He graduated from the Cleveland Homeopathic College in the year 1864, located in 1865 in Akron, remaining there one year. His constant companion was malaria.

In 1866 he returned to Cleveland and entered our office, where he remained a partner for three years, soon taking the lead as a surgeon. So universal was his success, and so exalted was the opinion in which the railroad officials held him, that they appointed the young man their surgeon, which position he held for several years. In 1864 he became a member of this society and rarely failed in attendance, always having articles that were original and interesting. He possessed a happy faculty in discussing papers, for he did so intelligently and gentlemanly. In 1888 he was chosen President, and proved himself an excellent presiding officer.

In 1868 he married Miss Elizabeth Myers. The tender, courtly attentions always bestowed upon his wife at home and while traveling won the admiration of all who came in contact with him, never forgetting to be polite at home or to ladies under all circumstances. This trait in his character made him a friend of both men and women. His home was a pleasant and happy one; his greetings and hospitality always cheerful; his friends were always welcome.

In 1868 he became a member of the American Institute of Homeopathy, and at his death ranked as one of the seniors. He was twice chosen Vice-President during his life, and several times Chairman of the Bureau of Surgery. In 1873 the Trustees of the Cleveland Homeopathic College honored him with the appointment of Professor of Surgery, a position he held for over a quarter of a century. In 1867 he spent one year in Europe engaged in his professional study. He was a member of the Cleveland Academy of Medicine, and might be called the founder of the society, as well as the Cleveland Medical College.

His railroad surgery, while still a young man, required a building for hospital work, so, with a few others connected with the college, he purchased the land where the hospital now stands on Huron street, and was one of its staunch supporters until the day of his death.

Dr. Schneider was a man quick in expression, strong in action, firm in purpose; and whether in expression, action or purpose that transparent honesty and simple integrity formed, as it were, the atmosphere in which he lived and moved, and which, so happily for himself and for those with whom he came in contact, enabled him to make others see clearly what he was desirous of accomplishing.

The great secret of his strength and power over his associates lay in his straight, honest and forcible manner—a rare gift.

Let us respect and honor, and, above all, let us learn lessons of industry, push, and energy in our profession from him we mourn to-day.

In this eulogy I have spoken the truth of this dead brother, my intimate and almost hourly associate for six years. I have written not a single word which my conscience does not vouch, which is not an index of my heart. Often he has told me he should never reach old age, but his ambition shortened his life and terminated an existence bright with honor.

After a long and tedious illness Dr. Schneider died February 4, 1895.

We mourn to-day for one of the brightest stars in our society. We mingle our tears over his memory and we will claim his fame

and his name shall be a part of our inheritance. His memory is safe; his good qualities and professional work, his virtue and his lovable qualities, all have the final seal. Never shall I forget the last look, when death had conquered. He lay in his coffin like a brave soldier taking his final rest.

W. S. JACKSON, M. D.

BUCYRUS, O.

In the death of Dr. W. S. Jackson, of Bucyrus, O., the profession has lost a rising man in his profession. He became a member of the State society in the year 1891.

About one year ago, in making a post-mortem examination, he pricked his finger, which resulted in blood poisoning. He sought medical treatment in Chicago and other cities without benefit. As a result of the poison his lungs became effected, and a change of climate was recommended. He visited Texas and Mexico, deriving no benefit from the change. Consumption had fastened its deadly fangs upon him, and medical skill and climate failed to relieve him. After several months travel, he returned to the home of his mother in Oxford, Kan., only to spend a few days with her before his final departure for the land beyond.

REPORT OF THE BUREAU OF MATERIA MEDICA.

W. B. HINSDALE, M. D., <i>Chairman</i> ,	Cleveland
	" <i>Provings and Practice.</i> "
H. C. ALLEN, M. D.,	Chicago
	" <i>The Nosodes in Tuberculosis.</i> "
CHAS. S. MACK, M. D.,	Ann Arbor
	" <i>The Science of Materia Medica Pura.</i> "
WM. OWENS, M. D.,	Cincinnati
	" <i>Morbid Conditions of the Human Organism Induced by Drugs.</i> "
C. S. AMES, M. D.,	Ada
	" <i>Senega in the Treatment of Coughs.</i> "
J. A. THOMPSON, M. D.,	McComb
	" <i>Some Confirmations.</i> "
G. W. SPENCER, M. D.,	Cleveland
	" <i>The Therapeutics of Some Skin Diseases.</i> "
WM. HOYT, M. D.,	Hillsboro
	" <i>Rhus Toxicodendron.</i> "
A. W. REDDISH, M. D.,	Sidney
	" <i>Aconite and Veratrum—A Comparison.</i> "
F. C. STEINGRAVER, M. D.,	Bluffton
	" <i>Aqua Pura.</i> "
O. S. ALLEN, M. D.,	Pemberville
	" <i>Rapid Prescribing.</i> "

A SYNOPSIS: PROVINGS AND PRACTICE.

W. B. HINSDALE, M. D., CLEVELAND, O.

The basis of the art of making a prescription is the *materia medica*.

Provings are the substance of *materia medica*.

In this sense *materia medica* is a codification of the results of tests that have been made through the administration of drugs to people generally presumed to be healthy.

In order that a complete and reliable proving may be obtained, the prover and the person upon whom the proving is made must be observing and accurate, and, above all, void of the imaginative faculty or holding it for the time in check.

To prove *one* drug is a labor of magnitude.

To prove a number of drugs is the task of a life-time.

To be a *good* prescriber one must *know* *materia medica*.

He must be a constant, intelligent student of this essential branch.

To be a prover in the sense of working out accurately the pathogeneses of drugs, and to be a skillful physician at the same time, in the sense of applying the details that have been worked out, require more labor than one person is capable of performing.

It is not to be denied that the physician can do something toward the development of *materia medica*, and the systematic prover may apply what he works out, but the practical impossibility of scientific proficiency in both lines is still evident. It is sought to make the point that the labor of proving and reproving drugs and tabulating the results is a profession within and of itself, and is not a labor which can be systematically carried on by one who is constantly engaged in the activities of practice.

The time is come when, to prove a medicine, something more must be done than to swallow it merely, and to write answers to the question, "How do you feel?" *Instruments of precision must be used and accurate determination of changes of function must be made.* The test tube, the re-agent, the microscope, the ophthalmoscope, the stethoscope, the thermometer, the scales, and all the appliances of the chemical, physical, and physiological laboratories,

must be brought into use if our *materia medica* is to be maintained or developed as a scientific entity.

It is not my purpose to depreciate the tasks that were performed by the founder of homeopathy, or of a number of our great authorities upon the subject of *materia medica*. They were men of indefatigable energy, and were stimulated, if not intoxicated, by the unfolding of a new idea, but, great as is the good that they have done, were they working to-day they would be carrying their work to the limits that have been indicated. If homeopathy hopes to perpetuate herself and to continue a growing science, she must continue a systematic and thorough proving of drugs.

A system of work must be pursued more elaborate than can ever be accomplished by men who depend upon their professional practice for their support. *Materia medica* laboratories should be established, the directors of which are expert chemists, anatomists, physiologists, histologists, pathologists, men whose abilities will enable them to interpret what they read in the unfolding scroll of their experimental researches. They would stand to the practicing physician as the experimental electricians do to the man who utilizes their theories and discoveries, or as the chemist or physicist who, in his laboratory, discovers the way in which the practical engineer may accomplish some desired result.

The one is the discoverer, the other the practical worker. That the purposes of utility be subserved, and that the theory and the practice of medicine be developed, though sufficiently distinct to be different professions, activity should never cease in these all-important subjects that are so intimately co-related.

THE NOSODES IN TUBERCULOSIS.

H. C. ALLEN, M. D., CHICAGO, ILL.

At the last annual meeting of this society a paper on "Bacillium" was read by Dr. Henry Snow, of Cincinnati, in which its use in homeopathic practice is classed as isopathy. That I may not misquote the author I give his language:

Isopathy is an ancient doctrine which has witnessed an immense revival of late years. Koch with his lymph, Pasteur with his hydrophobic virus, and Brown-Sequard with his elixir of life [and he might have added Jenner's vaccination and Hammond's latest sad], what are these but the revival, or attempted revival, of isopathy?

Among homeopaths the great Herbert gave it his sanction.

There is little doubt that Dr. Snow made a brilliant and genuine cure, as reported, but it was a homeopathic cure, made with a genuine homeopathic remedy. There was not an isopathic factor in the case, as reported, and many such cures with tuberculinum are being made both in this country and Europe. But the cures are accompanied with many failures, and the failures will continue with more or less frequency until we have as thorough and reliable a proving as we have of psorinum. This can only be secured by the united effort of those interested in the eradication of the constitutional miasms, as set forth in the chronic diseases. Until then we must depend on the clinical characteristics common to all the nosodes, viz., when, with a family history of tubercular affections, the best selected remedy fails to relieve or permanently improve; symptoms ever changing; complaints affecting one organ then another—the lungs, brain, kidneys, liver, stomach, nervous system—beginning suddenly, ceasing suddenly; takes cold easily, without knowing how or where (cal., kali c., psor.); emaciation rapid and pronounced; losing flesh while living well (cal., con., iod., nat. m.)

Hahnemann claims that it is not isopathic, for he says, "Chronic Diseases," vol. I., p. 195:

In the subsequent list of antipsoric remedies no isopathic remedies are mentioned, for the reason that their effects upon the healthy organism have not been sufficiently ascertained. Even the itch miasm (psora) in its various degrees of potency comes under this objection. I call psorin a homeopathic anti-psoric, because if the preparation of psorin did not alter its nature to that of a homeopathic remedy, it never could have any effect upon an organism tainted with that same identical virus. The psoric virus, by undergoing the processes of trituration and shaking, becomes just as much altered in its nature as gold does, the homeopathic

preparations of which are not inert substances in the animal economy, but powerfully acting agents.

Psorin is a *simillimum* of the itch virus. There is no intermediate degree between *idem* and *simillimum*; in other words, the thinking man sees that *simillimum* is the medium between *simile* and *idem*. The only definite meaning which the terms *isopathic* and *æquate* can convey, is that of *simillimum*; they are not *idem*.

So, according to Hahnemann, there can be no such thing in homeopathic practice as *isopathy*, when the potentized remedy is used. It is the use of the crude drug, like chewing the leaves of *rhus* to cure the patient who has been poisoned by *rhus*, that constitutes *isopathic* practice. It is *idem, the same*, not the similar remedy. A patient suffering from syphilis can not be inoculated or affected in any way by his own virus in the crude state, but when potentized it becomes an active homeopathic remedy. The use of the non-potentized virus of tuberculosis, as proposed by Koch is, no doubt, an illustration of *isopathy*. But that is a very different thing from the homeopathic use of the potentized virus, as practiced by Swan, Burnett, and many of the ablest and most successful prescribers in the homeopathic school in this country and Europe. Other eminent men among us have followed in his footsteps. Unfortunately some have carried it to an absurdity, but with these we have nothing to do.

If *isopathic* medication be valuable in the treatment of the sick, that value must be increased by potentization, according to the homeopathic law.

This does away with one of the objections to *isopathy*, viz., that it is a disgusting practice. These nosodes are used only, so far as I know, in the higher potencies, beyond the coarser tests of the senses, chemical analysis, and the microscope.

Another objection to it is that it is not homeopathic. The answer to this is that nobody claims that it is so.

THE SCIENCE OF MATERIA MEDICA PURA.

BY CHAS. S. MACK, M. D., ANN ARBOR, MICH.

Were my copy of Dunham's "Homeopathy, the Science of Therapeutics" at hand, I could quote from it, I think, what would serve as the theme of this present paper. Many of you will recall Dunham's clear putting of the fact that essential to homeopathy are the two sciences, drug science and disease science. That these sciences must be kept perfectly distinct, so far as the practice of homeopathy is based upon them, is a point I would urge in this paper.

Development of *materia medica pura* is a slow process. Science does not become impatient; she has all the time there is, and is perfectly willing to plod on and patiently wait for results. She has no special interest in brilliancy of achievement; her whole interest is in the truth, and in the faithful, unprejudiced pursuit of it.

The *unprejudiced* pursuit of truth is what I would urge upon all who would advance our knowledge of *materia medica pura*. *Prejudice* has, I think, at times led to vitiation of our records of *materia medica pura* when provings were being made with drugs which already had an established reputation in connection with certain diseases. Some provers of such drugs and some students have, I think, been at times led by *prejudice* to think that they found in pathogenesis what showed previously accepted practices to be instances of homeopathy. Such prejudice should be studiously avoided.

Essentially the same error as that just cited is regarded for clinical symptoms and clinical verifications as basis for a homeopathic prescription. To accord clinical symptoms and clinical verifications, weight is unobjectionable so long as we recognize as empirical any practice based upon them, or any tinge they give to a prescription otherwise homeopathic, and so long as we keep them from vitiating our records of *materia medica pura*.

I plead for the most careful, painstaking, critical work in the science of *materia medica pura*, and urge that its records be kept entirely free from inference drawn from therapy.

DISCUSSION.

Dr. Hinsdale—In relation to the points made in Dr. Mack's paper, as I understand the paper, they are about these: That there ought not to be any symptom admitted into this *materia medica pura*, nor any statement of any condition that has not been the result of a proving according to the strict homeopathic rule for compiling *materia medica*; and still, furthermore, as I understand the paper, the Doctor admits that very many valuable symptoms, so-called clinical symptoms or irregular symptoms are, on reasonable grounds, to be accepted as worthy to be followed in the homeopathic practice. Now his plea is, as I understand it, that the one shall not be contaminated with the other, and still if the other are of sufficient value and importance to be worthy of recognition, and should be tabulated, or formulated, or preserved in some way somewhere, so that they may be used for reference, but where shall they be put on record? A great many of our codes of symptoms are arranged on this plan, that those that are the direct results of provings are put down, and those that have come in by way of clinical experience or other irregular ways, are marked with some distinguishing character which helps us to recognize the fact that those do not belong necessarily to the *materia medica pura*, but still are to be regarded as valuable clinical additions to the *materia medica*. Now, if they are to be expunged from the code of real symptoms that have been discovered according to the law for making provings, and are still worthy of preservation, what are we going to do with them? Are we going to have two departments to the *materia medica*, one which consists of pathogenesis and the other of clinical provings, possibly the one more valuable in some instances than the other? Shall we carry along two *materia medicas*, or shall we mix them up, and still indicate the one by some distinguishing mark so that it will be recognized at a glance that it comes into the fold by some other way than by the straight gate?

MORBID CONDITIONS OF THE HUMAN ORGANISM INDUCED BY DRUGS.

By WM. OWENS, M.D., CINCINNATI, O.

Morbid conditions of the organism can arise from two causes only, traumatism and disturbed function. Traumatism arises from impact with foreign substances.

All function is derived from the organic nervous system. Therefore, all morbid conditions of the organism, whether induced by drugs or so-called disease, result from some disturbance of this class of nerves.

The thoughts contained in this paper are based upon what has been recently demonstrated by the study of comparative histology, anatomy, and physiology, to wit: that life is a unit, organization is according to law, and the cell is its representative; that protoplasm alone is living matter, and as the clay in the hands of the potter; and that the whole of the phenomenon of organization and of life should be re-studied in the light of modern science; that disease, so-called, is not a thing tangible, but the product of forces in themselves normal; all of the phenomena of morbid processes taking place in the organism are but perturbed physiological processes; that so-called nervous diseases are secondary and subjective; so-called diseases of the blood do not exist from any primary condition of the blood *per se*, but arise from causes lying behind forces controlling nutrition. These forces reside not in the brain or spinal cord, as usually taught by physiologists, but in the vegetative or organic nervous system, and more particularly within the great center of organic life, the solar plexus. These fundamental propositions cannot be discussed in detail here, and must, therefore, be deferred.

It has been well said that a thorough knowledge of pathology is the only rational basis for therapeutics; for by the study of pathology we are enabled to approach more nearly to the etiology of the morbid processes that affect the organism, and which will greatly assist us to make an intelligent selection of the means for their removal. I hope to show that *materia medica* is of no less importance to the therapist than pathology. After the pathol-

ogist has discovered the relation of the morbid process to the organism, it remains for the therapist to select the remedial agent, and he can only do this by a thorough knowledge of *materia medica*. The homeopathic therapist claims that he has a law by which this can be done, to wit: The relation of the drug to the morbid process as revealed by its pathogenesis. While Hahnemann has demonstrated this relation unequivocally, he has failed to suggest the *modus operandi* of the pathogenetic process by which these results are brought about, and, in fact, says that it is useless for the physician to have this knowledge. All rational therapeutics must spring from a purpose or design to accomplish an object. To do this we must use means with an intelligent purpose. To use them intelligently we must not only know that they will induce a desired result, but also to know by what process it is accomplished. The vast monument of valuable drug provings bequeathed to us cannot be fully appreciated until we can comprehend how this drug or that produces its effects upon the organism, and not only that but the tissues to which the drug seems to be especially related.

During the latter part of the last century and the forepart of the present one there lived a celebrated French physiologist, Bichat, who announced the opinion that man was possessed of two nervous systems, and that he possessed two kinds of life. One of these nervous systems he denominated the vegetative or sympathetic—that system of nerves which presides over organic life—and the other, or second nervous system, he called the nervous system of animal life, or cerebro-spinal nervous system, which brought its possessor in contact with the external nature, and gave him the sensations of pleasure and pain.

The first is endowed with all of the functions essential to mere animal or vegetative existence, innervation, nutrition, respiration, circulation, secretion, and excretion; this is physiological life.

The second class of nerves, described as the cerebro-spinal, enabled its possessor to see, hear, taste, smell, feel, and move, and superadded the ability to comprehend, understand, combine, reason, and appreciate all of the sensations derived from all the other organs and functions of the body.

The definition of the first class of nerves is all that we could

desire. That of the second might be greatly extended and embraces psychology, sociology, pneumatology, and for the purposes of this study, might be here dismissed with the observation that it is non-essential to the physical existence of vegetable man or animals, the first class of nerves being alone the agency through which all of the functions essential to organic life are performed, and upon which alone we shall devote our time in the effort to elucidate a scientific basis for the homeopathic *materia medica*. The first question which arises is this: What effects do drugs produce upon the system? and the second is, what tissues are involved in the production of these effects? and the third question is, what effects are produced upon these tissues by drugs? In answer to the first question we say, drugs, when introduced into the organism, are foreign substances, and produce irritations, followed by stimulation or excitement; and in answer to the second question reply, surely not upon passive organs like the bones, tendons, cartilages, muscle, or blood, for under normal condition these are insensible, and could yield no response. It follows that all tissues involved must be susceptible of irritability, and of this alone the nerve tissue is the representative. All of the functions performed by organs or tissues are induced by nerves supplied to them, which become irritated by the foreign substance introduced into the organisms, inducing stimulation or excitation, which are essential to the performance of all function. If those drugs, acting as foreign substances, induce disturbances in the organisms, it follows that the irritating substance must be brought in contact with nerve tissue. And this brings us to our third inquiry, what are the effects upon nerve tissue resulting from the application of those irritating agents to it?

We know that electricity is a nerve irritant, and that Matteucci, Claude Bernard, Hammond, Beard, Brown-Sequard, and many others have, by direct experiment, demonstrated its power to increase the functions of organs, and that when the primary current is applied to the vaso-motor filaments of the organic, immediate increase of function takes place. Increased secretions from the liver, kidneys, salivary glands, mucous membranes, and skin, have all been demonstrated under the use of electricity, not in consequence of any specific property in the electricity itself, for when a feather,

piece of wood, metal, or the fingers were applied to a severed nerve, the result was the same. Yielding increased secretion, increased muscular action, and, in some cases, increased nutrition of the part.

These, with the numerous and exhaustive experiments made upon horses, frogs, rabbits, dogs, cats, sheep, and guinea pigs, by Matteucci and others, all tend to show that all function of a part or organ depends upon the susceptibility of a part or organ to receive impression from external objects, and that this is itself dependent upon the integrity of nerve filaments. All function ceases the moment that the continuity of nerve tissue ceases, and that the restoration of continuity or the application of an irritant restores function. Upon this point but one proposition remains, and that is to show that drugs sustain in this respect the same relation to the human organism that electricity does. We have seen that the application of a feather, piece of wood or metal, to an organic filament produces the same result as if electricity had been so applied, secretion followed.

If a pungent, sapid, or irritating substance enters the mouth or any of the canals lined with a mucous membrane, the result is a flow of saliva or watery mucus. Should such a substance enter the stomach increased flow of mucus and gastric juice follows; if the substance be transferred from the stomach to the intestinal canal, intestinal secretion becomes established. These secretions are the product of normal function; when the irritant is applied the function becomes excessive or abnormal, and tends to exhaustion. Should the irritation be greatly prolonged or intensified, we have exhaustion of nerve force, which is followed by loss of functional power, with paralysis.

The same law holds good in regard to the action of drugs. If the dose be large, oft-repeated, or long continued, the primary effect is to over-stimulate and greatly increase the function or office of a part, when finally exhaustion follows, and paralysis or loss of power supervenes.

That which is true of electricity and drugs is true of all forms of motion or force, whether applied to atoms, molecules, or masses. Having reached the conclusion that all function is dependent upon

the presence of nerves, it becomes necessary in the prosecution of our study to ascertain, first, what class of nerves is involved; and, second, what these nerves are composed of; and, third, wherein resides the power which yields the nerve force displayed in the performances of the various offices of the human economy.

We have seen that the organic nervous system in man performs all of the offices essential to his physical existence. It carries on the processes of innervation, nutrition, secretion, circulation, excretion, and respiration, and these without the aid of the brain and spinal cord.

Heretofore the existence of a nervous system in plants has been accepted as an inference, and from analogy rather than from demonstration. Recently investigation has set this matter at rest beyond a doubt, showing a harmonious chain of innervation from the lowest to the highest form of organic life, and that the functions performed under the influence of the nerves is in all forms relatively the same.

The next question, of what are these nerves composed? is answered by the histologist. All agree that the most primitive form of organization is the cell and aggregation of cells, and that before cell protoplasm alone existed, and that this is unorganized pabulum; in it is developed the cell, with or without nucleus or nucleolus, and may exist with or without cell wall, and that there is no physical or chemical difference between the cell which would develop into a vegetable or that which would develop into an animal, and that the impression which develops the one or the other is received while it is in its most plastic state. The type is generic. The organization is dependent upon a specific influence. It must appear, therefore, if disease exists in the organism, it must consist in some morbid impression made upon the protoplasm which enters into the structure of the organism in its unorganized state.

It is from this point that the student of homeopathic *materia medica* must commence his study of morbid conditions affecting the organism, whether arising from so-called natural or artificial causes. As we have seen, all of the functions essential to organic life, either vegetable or animal, are performed under the control of the organic nervous system, and have been abundantly demonstrated

by Noegli and Cramer, of Zurich; that all life results from and is carried on by this normal performance of the various functions appertaining to it, and that any deviation from this normal functionalism results in so-called disease, it follows that all agencies or medicaments used in the removal of these morbid conditions should be applied to the force which sustains those functions, and which tends to guard against such conditions as would result in their disturbance or restore them when disturbed.

We see the same causes producing so-called diseases in the vegetable, as well as in the animal, according to their natures. The vegetable will no more endure excessive heat, cold, moisture, or bad nutrition than will the animal. It will as certainly fade and die if deprived of light, air, and suitable shelter, as the animal will. If the supply of protoplasm is cut off, or supplied in insufficient quantity, the plant will languish and become dwarfed, as well as the man. Hence, we see that there is in them a common bond, a nature common to all, and upon the integrity of which a common life (organic life) depends. And it is from this point that the study of the laws of health, of life, of disease and death should be studied, and from which alone a scientific basis for homeopathic *materia medica* could be derived. The law by which constructive and retrograde metamorphoses are brought about, and the agencies which accomplish these results, are the first and most fundamental part of our medical education. The question arises, can this be attained? We believe that it can by a thorough and careful study of drug action in relation to disease in its entirety. Its etiology, its pathology (both functional and organic) and its symptomatology. If this cannot be done then our therapeutics is not a law; it is a mere empiricism. But, on the other hand, if we can show by what process chinchona brings about a state of chill or cures it, by what process a chinchona cachexia is produced, and give the various steps in the process, and show why the blood undergoes certain pathological changes under its influence, show what changes take place in the spleen, liver, and pancreas; how and why it arrests gangrene and favors the healing of indolent ulcers; and how and why secale causes gangrene at the periphery; why and how it produces contraction of the uterus, the intestines, and all non-striated

muscular tissues; why and how it causes delirium and convulsions; through what process and how belladonna and aconite disturb the circulation; why and how they induce cerebral hyperemia; why one induces arterial congestion and the other venous congestions; why and how arsenicum at one time induces gangrene, and at another arrests it; and, in short, we can never have a scientific *materia medica* until we can explain the rationale of the action of the drugs we use, and demonstrate that action in harmony with natural law. It is necessary that every drug should be thus analyzed before we can claim for any scientific value, or that we have reduced it to a scientific test in its entirety. You ask me can this be done? I affirm that it can. You ask me how? By first securing a basis in the organism from which it can be said that the morbid process springs, and this shall be applicable to every drug. Through what medium do drugs produce their effects? Do they produce their effects through the blood or nervous system? If not through the blood, which cannot be maintained, through which of the nervous systems (cerebro-spinal or organic) does the morbid process invade the organism? As we have shown above, all of the functions of the organism are under the control of the organic nerves, and as these nerves control the functions of the organism, we arrive at the conclusion that the organic nervous system alone is involved when morbid processes become established in the organism, and that any disturbances arising in the cerebro-spinal nervous system or blood are necessarily secondary, and result from irritations at the organic nerve centers. Disturbances of the circulation cause cerebral hypermia and perverted intellectual functions, which we call delirium. If long continued or greatly intensified the cerebral vessels become dilated, impinging upon the neurine substance, and establish a permanent change of mechanical relations of the cerebral nerve tissue, and permanent mental aberration occurs, which we call insanity; or, again, depressing atmospheric influences applied to the surface of the body speedily disturb the capillary circulation, driving it from the surface, and the result is visceral congestion, and if long continued this is followed by active inflammation, exudation, infiltrated, and, possibly, suppuration, ulceration, or necrosis. A slight catarrh of the air passages may result in a violent

croupous pneumonia, hepatisation, or gangrene of the lungs. A slight intestinal catarrh may terminate in a most violent and even fatal diarrhoea. But I need not multiply illustrations to show you how important some of these simple etiological facts are in the chain of causation of many of our most formidable and fatal maladies. Your own observation and experience will, I doubt not, supply any number of examples.

It remains now for us to supply a connection between these etiological conditions and drug action. If it be true that many of the simplest processes of nature are capable of producing some of the most profound and fatal disturbances of the living organism, and that these results are brought about by first producing disturbances of one or more of the functions of the organism, and that greatly intensified or prolonged disturbances of function begets organic change. We have attained a very simple yet intensely interesting solution of the processes and phenomena of so-called disease, which may be formulated thus:

First, all forms of disease, except those of traumatic origin, are the result of functional disturbance; and, second, all disturbance of function, whether arising from so-called natural causes or artificially induced (drug pathogenesis), affect the organism in a similar manner; and, as a conclusion from the foregoing, we find that drugs, acting according to a natural law (*ab irritatio ubi affluxus*), produce the same effects as would an external natural force acting upon and impressing the organism; first, in disturbing function; and, second, in causing organic change. This change results from excessive or deficient functionalism.

We must conclude, then, that all morbid processes (so-called disease), whether arising from so-called natural or artificial causes, are governed by natural laws which govern the organism, and are propagated under the same, and terminate in harmony with the resultant forces which projected them. To secure a scientific basis for homeopathic *materia medica* we must study carefully, first, the laws and functions of the living organism, and next the disturbances which drugs are capable of producing in them. It is not enough that we content ourselves with merely observing the facts and phenomena flowing from these drug disturbances. It is our

privilege and our duty, as scientific physicians, to search for the why and the wherefore; to discover, if possible, a law by which these facts and phenomena are brought about, so that they can be arranged into systems and classified scientifically; a law by which we can explain how it is that aconite and belladonna disturb the functions of heart and blood vessels; how it is that arsenic and veratrum induce the phenomena of cholera; how it is that opium induces sopor, paralysis, or death; and the changes in the blood, as well as other tissues of the organism, which are necessary to establish that state, and without which death cannot take place. These are the fields of research to be traversed by the physician, not of the future, but of to-day. Our profession cannot stand still, it should not stand still, or it will become atrophied and pass away, and give place to something else which will progress, which will live, and develop, and expand, and absorb all science, physical, psychological, and chemical.

This brings us to the consideration of the relation of drugs to the human organism.

The law, "similia similibus curantur," based upon natural law and essentially scientific, is the only law of cure. Grauvogl says:

The aim of all science must be directed to this, in the place of contingent to set up that which law makes necessary.

Science admits of no contingencies; therefore, to study drugs from a scientific stand-point, everything should be reduced to the test of demonstration. In order to be of any value, from a scientific stand-point, it should appear that drugs, by a natural law, induce uniform changes in the functions and feelings of the organisms, which Hahnemann defines to be disease manifest through the totality of the symptoms in every case. The healing property of drugs, he distinctly states, resides in the power of a drug to produce distinct changes in the functions and feelings of the human body, and to excite numerous definite morbid symptoms in and about the same.* "Every true medicine (drug) acts at all times and under

* "Organon," p. 32.

all circumstances upon every human being, and excites its peculiar symptoms in the organism."

Thus, every living human organism is always affected, and is, as it were, infected by the drug disease, which is not at all the case with natural disease.

Hahnemann further maintains that the primary effects of drugs are the homeopathic indications for their use,* and that to be homeopathic their effect must be "distinct," "definite," and "positive."† And that all mixed symptoms or after-effects are unreliable. At this point Hahnemann drops the action of drugs on the organism to illustrate his discovery by applying it in all clinical and therapeutic uses. His law of cure he regards as well nigh perfect, but rejects all attempts at explaining the modus operandi of the cure, much less that of the pathogenetic force, and characterizes as "useless" for the physician to know how the vital force brings these conditions about,‡ or why or how the drug creates the morbid process.

We maintain, however, that if the why and how of drug action were discovered that it would add greatly to our facilities in controlling the morbid process. Every homeopathic physician should be a rationalist in medicine, accepting nothing that is not proven, and apply no remedy without distinct reason therefor. He should in all cases search for the cause of the morbid process, and carefully observe its phenomena, and vigorously apply the therapeutic law. Etiology should be his corner-stone; pathology his foundation, laid broad and deep; semeiology his superstructure, and by which alone a wise and intelligent therapeutics can be directed.

No drug can be regarded as a true similimum of any morbid process, unless within its pathogenesis is contained the totality of the phenomena of the so-called disease. It is for the want of a law which will show the relation of drugs to the organism, and how they affect it, that our *materia medica* has made so little progress these many years. Hahnemann discovered and developed a law for therapeutics approaching more nearly to the scientific accuracy than any heretofore.

* "Organon," p. 139.

† *Ibid*, p. 152.

‡ *Ibid*, p. 12.

But in relation to the action of drugs upon the human organism no uniform basis has yet been accepted by the profession as to the how and why the drug affects, or, as Hahnemann states it, "infects" the organism. And for this reason the homeopathic *materia medica* is far from what it ought to be. The action of drugs has not been studied and noted *seriatim*. Many of the first symptoms occurring are the last noted, and vice versa. Nor is this the most unsatisfactory feature of the study of drugs. Opposing views are entertained and taught by different writers and lecturers in relation to the action of drugs. Some accept the Hahnemann dicta that the primary are the only pathogenetic symptoms; while others claim and teach that the secondary or, after-effects, are alone characteristic. One class of physicians hold that most, if not all, of the morbid impressions are made upon the organism through the blood; while another class claim that the nerves and blood are both involved, and that absorption is an essential condition of drug impression. And yet another class maintains that the nervous system alone is the medium through which the organism is invaded, some drugs affecting the cerebro-spinal, and others the organic nervous system. But no one has assumed to charge either with the whole responsibility as a medium for the accession of the morbid process. Neither has a well-defined line of distinction been drawn between symptoms objective and symptoms subjective. And as no two of these parties agree, it follows that the study of the morbid process from their various stand-points, and the theory upon which drugs are applied for the removal or correction of that process, must be as widely different and as varied as we should expect of the most pronounced empiric, and the results unsatisfactory to the last degree. Hahnemann says:

"All morbid influences produce their effects, establishing disease by disturbing the functions and feelings of the body."

All living organisms are endowed with certain powers or forces, commonly denominated functions, all of which are essential to life, and which are controlled by a power within themselves, which we call innervation. Hahnemann mentions the sensitive nerves as receiving drug impressions, and transmitting them almost instantly

to all parts of the body. Yet animals and vegetables not endowed with nerves of sensation are subject to the same morbid processes as those which are thus endowed. Mental impressions are also instantly transmitted, and the result is disturbance of the function. It will not be claimed that any one of these various functions is directly under the control of the mind. Impressions made upon the mind produce their effect through the organic nervous system, which gives power and force to all the functions of the body, increasing or diminishing them. Drugs, from their external relations, induce similar effects, impressing the organism, increasing or diminishing functionalism. All drug pathogenesis gives rise, first, to disturbed function sensation or feeling, and by these disturbances show the relation of the drug to the morbid process or so-called disease. But no one, so far as we know, has yet attempted to show that these results have been brought about by the process of natural law, or how the changes, which we call pathogenetic, are induced. That such changes do occur will not be questioned, and that they correspond to similar changes associated with so-called natural disease I trust will also be admitted; but through what medium, the why and the how, they are induced has never been explained. And here lies the unsolved problem of rational or scientific medicine. If disturbances of "function and feeling," which all drugs produce in the organism, can be shown in all cases to be the same, "definite," "distinct," and "positive," as claimed by Hahnemann, and that they arise uniformly from disturbed physiological processes, and that the disturbances correspond in kind and degree to the properties of the substance inducing them, a great step will have been gained towards securing a scientific basis for our *materia medica*. But to discuss this point intelligently, a standard or basis must first be secured and accepted, from which can be demonstrated that all morbid impressions, whether from drug or so-called disease, arise.

That life exists must be like many axioms in geometry also assumed, whether by divine act or organic force need not here be discussed. Intimately associated with life is health. Health depends upon normal functionalism. Functionalism arises from innervation, and innervation can only arise from vitalized pabulum and cell-genesis or organization. In pursuing this topic further we

find that as the essential conditions of life, first, organization; second, innervation; and, third, functionalism; and further find that functionalism consists in, first, nutrition; second, circulation; third, respiration; fourth, secretion; and fifth, excretion; all essential to organic life and under the control of innervation.

No life, be it vegetable or animal, can survive a moment without innervation. The lower, as well as the higher, forms of life, are all furnished with organs adapted to the performance of certain functions. In the normal performance of these functions resides health. In their aberration or disturbance we observe disease. Charles Darwin has shown that all vegetable life is endowed with a power corresponding in every respect to innervation, and by that power all the functions of circulation, respiration, nutrition, secretion, and excretion are performed. Deprive the vegetable of the power to perform either one of these, and it will as certainly die as if it were dismembered at its roots. The mimosa Venus fly-trap and pitcher-plant are familiar examples of sensation, almost approaching intelligence. Numerous experiments have been made by placing plants under bell glasses, charged with the vapor of chloroform or ether, and in every case their development was immediately arrested, to be resumed on the removal of the anæsthetics.

Mr. Darwin insists that not only the plants named show marked indications of a nervous system, but that all plants are endowed with a similar structure, and that similarity of structure implies similarity of function, and that every twig, stem, and rootlet is in constant writhing, and wriggling, and rhythmical motion, and that the leaves and flowers of plants have their hours of motion and of rest—labor in the day-time and sleep at night. Many leaves and blades assume the vertical position at night, and fold themselves up to protect their upper surfaces from the chilling effects of evaporation and the falling dew. The great celandine shrinks from the cold breezes and the chilling rains. At night it is said that the lotus flower folds its petals and seeks shelter beneath the leaves of the plant against the chilly dew. The runners and tendrils of the climbing plants and gland hairs of the carnivora all point to innervation as the source of power from which those utilitarian efforts

of vegetable life arise, and by which all the functions of life are performed, the normal performance of which constitutes health, and their disturbance constitutes disease. Suspended innervation insures suspended function; restored innervation insures restored function. The conclusion on this point, therefore, is that life can only exist harmoniously under normal functionalism, and that this can only exist when we have healthy innervation.

The question now presents itself, from whence does innervation arise? We are taught by histologists that protoplasm forms the physical basis of life; that this substance is the only living matter; and that when it becomes organized into cell-forming tissues it passes into a state of retrogression, decay, and death; and that protoplasm underlies all organic life; from it all cell-genesis takes which is the first step toward organization. They also inform us that there is no difference, physically or chemically, between the protoplasm, which forms the vegetable cell and that which form the animal. Quackett says:

However striking the difference between an animal and a plant, may be seen at first sight in the higher groups, and a more extended examination shows that animals and plants gradually approach each other as we descend in the scale, until we meet in a common center, the simple individual cell. At this point all means of distinction between the vegetable and animal organism ends, and no feature exists which, in the present state of science, can enable even the most distinguished microscopist to determine to which of the two kingdoms the individual cell belongs, since it possesses characters common to both.

And protoplasm being the only living matter, it is constantly in motion, and yields to us apparently spontaneous innervation. We say apparently spontaneous, but really not so, presenting us all of the conditions of motor nerve influence, as witnessed in its wriggling, writhing, rhythmical movements in plants, and as witnessed also in the rhythmical contractions in the flesh of recently killed animals. These phenomena seem to be identical, and arise from the same cause, viz., the irritability of protoplasm within the tissue.

Now we are informed that the organic nerve cell, which forms the basis of the organic nerve system, is composed of only gran-

ules of protoplasm nucleus, and nucleolus with uni-polar, and multi-polar elongations, constituting nerve filaments, which supervise and control all function. We shall, therefore, find it impossible to conceive of any other source for innervation than protoplasm, or other cause for nerve energy than irritability, which is shown to be an inherent property of that substance, resulting in cell genesis, and that nerve energy which may be increased or diminished by the application of any agent capable of inducing irritation of protoplasm. Thus, we have endeavored to trace innervation to protoplasm and cell-genesis, to find here organic cells constituting a sympathetic or organic nerve system, which controls all of the functions of life, and in which resides the powers which controls health and even life itself. -That here we have a source of all morbid impressibility, whether the resulting process consists in disturbed nutrition, secretion, excretion, circulation or respiration. Here, too, we find the fountain from which springs, as from Pandora's box, all of the evils (so-called disease) that organization is heir to; and upon this rock we erect our pathogenesis as a scientific basis for a homeopathic *materia medica*.

The old botanists teach us that all of the functions essential to organic life, except innervation, reside in the vegetable as perfect and complete as in animals. It remained for Charles Darwin to place this question of innervation in plants beyond a doubt. Though in the lower forms of life, in both the animal and vegetable, a nervous tissue cannot be detected, and in some its manifestation is very obscure. Yet the fact that these organisms live, propagate, and, when brought into favorable conditions, manifest all the phenomena of life most luxuriantly, demonstrates most conclusively the presence of a power which causes a corresponding phenomena in the higher forms of life. Indeed, it seems impossible to conceive of life in any form without innervation and the existence of nerve matter, and all that the term implies in these organisms, even of the most primitive character. The existence of organic life here, and the changes incident thereto, implies that the morbid process and death begin here also. The morbid process and death take place in the lower forms of life under the same conditions and from like caused as in the higher. The *micrococcus* and the

ameba, the zoophites, the radiata and the articulata, exist under the same laws and conditions of life as the most favored of the vertebrata. When the domain of their functions is invaded by any agency or force inimical to those functions, they cease, and death results as certainly as if such disturbance had occurred in the higher forms.

The one phenomenon constantly present in living organisms of every form is nutrition. Inferentially, nutrition implies circulation, though no system of vessels can, in many cases, be demonstrated. In the lowest forms of life in which a vascular system can be demonstrated, however, we find ever present nerve filaments (vaso-motors) accompanying the vessels and controlling the circulation in them, and assisting them to transmit pabulum to the most remote tissues. Irritation of these nerve filaments will increase the supply of the circulating fluid to the parts and organs, and, as a result, we have increased function of the organ.

We assume, then, that drugs, like so-called natural forces, coming in contact with protoplasm or the primitive organic nerve-cell or its filament, act as foreign agents and irritants to those nerve-cells and nerve-filaments, and thus irritate, excite, exhaust or depress innervation, and thus cause excessive or deficient functionalism or a morbid condition. We shall find that irritation impresses molecules rather than masses. The feeble and subtle forces are usually the most efficient in disturbing the organism, and hence it is that the minute particles of drug substance, and the subtler forces existing in unperceived and undetectable gases, are among the most efficient agents in disturbing or restoring function and establishing or removing the morbid process, while, if applied in masses, the effect would be *nil*; and to render the impression more certain, positive, and effective, the impressing agent should be applied to the medium in its most susceptible and plastic state. From what has been presented it will appear that drugs so applied become irritants, and disturb the functions and feelings of the human body, and furnish us a guide in the therapeutic management of so-called disease.

We conclude, therefore, that the vaso-motors, being a part of the organic, vegetative, or sympathetic nervous system, are a prin-

cipal agency in supplying the various organs with nutrition through the circulation. As we have shown heretofore that vegetables and animals are alike endowed with a nervous apparatus which serves as a common bond of union in carrying on the functions of life, and that this apparatus is built up from protoplasm and primitive cells, and that the morbid process arises from impressions made upon, or disturbances affecting this nervous apparatus of the organism, we reach the final conclusion that the morbific agent, whether drug or so-called disease, must be brought into contact with tissues which are most intimately concerned in the processes leading to health and life, or to disease and death.

If these views of the origin of the morbid process be correct, whether induced by a drug or so-called natural disease (and we cannot see how the result can be otherwise under the law of similars), the claim that we may have a scientific basis for the homeopathic *materia medica* seems impregnable. One point alone remains to be met: the special and peculiar phenomena which each drug is known to induce. It is an admitted fact in science and in nature that no two substances are alike; no two forces in nature produce like results. Infinity in variety is the law of nature; and as all true cures of the morbid process are induced by attempts to imitate nature, it becomes necessary in securing these results to select the substance or agent, which, in its pathogenesis, induces the peculiar phenomenon which is observed under the morbid process as established by nature.

As a summary of the foregoing we submit the following propositions:

1. That the human organism is endowed with two distinct and yet united natures. The one purely physical or physiological, and pertains to organic life only; the other pertains to the mental, conscious, or psychological functions of man, and of animal having a brain and spinal cord.
2. The first of these corresponds to a tissue common to all organized life, which we have called the organic nervous system, for the reason that it alone is essential to life, and controls all of the functions upon which life is dependent.
3. The second of these natures corresponds to a special nerve structure, and is peculiar to beings having a brain and spinal cord,

differing in no respect, anatomically, physically, or chemically, from the first, except in its endowment with the functions of volition, general and special sensation, and which bring the possessor into contact with external nature, and enables him to comprehend, combine, and investigate, and give him the sensation of pleasure and pain.

4. All of the morbid phenomena witnessed in so-called disease, except those of traumatic origin, whether arising from so-called natural causes or from drug pathogenesis, are primarily only modified function, and are the result of impressions made upon the nerves which give rise to or have control over such function.

5. All such phenomena, whether physiological or psychological, are but the outward expression of a disturbed condition of the nerves of organic life, and can be traced to an intimate relation with this class of nerves.

6. All function normally performed may be increased or diminished by applying an irritant to the nerve which supplies the organ or tissue yielding the function.

7. If the irritant be applied with too much energy, or be too long continued, the nerves of the part become exhausted, when loss of function ensues, attended, possibly, with paralysis, atrophy, or death of the part or of the entire organism.

8. Morbid conditions artificially induced (drug pathogenesis) affect the same class of nerves, and disturb the same functions, and induce the same phenomena that we should witness in so-called natural disease.

9. The well recognized physiological principle that morbid impression, long-continued or greatly intensified, may induce organic changes, is well illustrated in many cases of drug provings.

10. It is a recognized principle among medical men that drug pathogenesis may be the result of single or repeated and successive impressions made upon, or irritations applied, to nerve tissue, until nerve force is generated, energized, or possibly exhausted.

11. Drug pathogenesis clearly demonstrates that a specific relationship or elective affinity exists between many drugs and certain tissues of the organism, and that these relationships are "distinct," "definite," and "positive," by reason of which specific disturbances are produced in these tissues or organs.

The foregoing propositions inculcate the following views, some of which are not accepted by the profession :

1. Drugs are foreign substances, inimical to living organisms, which, when introduced into them, act as irritants, and, as such,

stimulate the nerves with which they come in contact, and induce disturbance of function.

2. These views inculcate the doctrine that the forces of nature—light, heat, electricity, dryness and moisture, together with errors in food and drink, clothing and exposure—are chief factors, and act as irritating agents, inducing disturbances in the organism, causing so-called disease; and that, under certain conditions, mental and moral impressions in like manner not only predispose to but many times actually do cause the most fatal results.

3. The nerves impressed entailing these most fatal results are those which have their origin in the great solar plexus, the center of organic life.

4. This plexus is a mass of gray, ganglionic matter, from which arises a large number of filaments, which are largely supplied to hollow organs, composed, for the most part, of non-striated muscular fiber, which seems to be its special sphere of action.

5. These filaments form innumerable plexuses and ganglia along blood vessels and in the heart, which serve as independent foci of nerve force. The heart and arteries being most abundantly supplied with them.

6. Most of the functions performed under the influence of this class of nerves are rhythmical or intermitting in character, and are beyond the control of the cerebro-spinal nerves, and are performed equally as well in animals not endowed with a brain and cord.

DISCUSSION.

DR. BEEBE—This is certainly a very valuable paper. My friend, Dr. Owens, has investigated this subject many years, and he is far ahead of his time. It is to be regretted that Dr. Owens is a poor reader, or, perhaps, it is the bad acoustic properties of this hall; or, perhaps, it was the length of the paper; but some parts of it were not very audible to many of us in the body of the hall. But those who have investigated along the line of thought laid down by Dr. Owens can easily understand what an advance the author has made over the currently received opinions. Dr. Owens has been considered somewhat of a hobbyist on this line of thought. I know I thought so at one time, but I have read and re-read his several papers on this subject, and I believe now it is in the right direction. We must be on the alert or the old school will excel us. Says a member of the Detroit Allopathic Medical Society, "I have learned to pay great deference to the nervous system in the action of drugs." Most of the remedies used by homeopaths have a selec-

tive action upon this system. This paper should be studied by all of us in the future. Dr. Owens is far ahead of his time, but after he is gone the papers he has prepared upon this subject will be read with much interest and value.

DR. OWENS—I omitted one point. It appertains to the suggestion that was made this morning in regard to the origin of the vaso-motor nerves. It has been demonstrated over and over again that the origin of this system is in the solar plexus, and not in the brain. A few writers have lately taken the subject up, and have demonstrated the solar plexus as the center of organic life, and that the filaments that are sent out, and those that convey nutrition to the brain and to the spinal cord, and to every other portion of the body and its extremities, are in the bed of the solar plexus, or semi-lunar ganglia, as they used to be called. All the states and conditions of the body can be traced directly to that plexus, and there is no function of the body essential to life that is not derived from a force residing in the solar plexus. Persons have lost all the functions of the brain and spinal cord who have been paralyzed, and lost all consciousness in every way, still live. The mute is just as perfectly healthy as he was before he lost his speech. The idiot has lost everything except motion and sensation, and yet is as perfectly nourished as is the man with a fully developed brain and spinal cord. So, too, with the lower order of animals; they are as fully nourished and with as perfect a circulation and as complete a vaso-motor nervous system as has man. And yet the lower order of animals have no pons varolii or medulla oblongata, yet they perform the usual functions without the least difficulty or danger.

DR. SCHEBLE—For my part I suppose this is not a jest at all. I think it is wrong, however, to the younger members of this society to limit the causative influence of disease to simple traumatism and disturbed function. Now, if the doctor had a wound there and I had to operate upon it, if he was up to time, he would tell me to be very careful and exercise the most scientific caution to avoid septic poisoning. I want to say this much more in relation to this paper, that the doctor is behind the times, because it is a fact, and we know now that the microscope has developed immense fields for us in which we find hundreds, and I might say thousands, of different sorts of bacteria. The products of those bacteria give rise to alkaloids that are poisonous. That is the field to work in, and not upon the speculative forms that work upon the solar plexus.

DR. OWENS—I excepted traumatism from the beginning. He speaks of the alkaloids which are formed by these bacteria. It is well known that these do no harm, so long as the functions remain in good condition. If they have any action upon the system it is

as traumatic agents. Then they are poisonous; and, so far as that is concerned, it is true, but not so in relation to disturbed function alone. A disease without disturbed function is not consistent; it is a disturbance of function, but the disease can be arrested. When he speaks of bacteria allow me to call his attention to the fact that no bacteria have ever yet been discovered in a primitive condition of disease. It is only where the morbid process has become established, and the tissues have taken on an albuminous character. It is only then that bacteria can invade the system and produce those alkaloids. Up to that time the bacteria are inert. He also speaks of hundreds and thousands of bacteria. There are only thirty-seven kinds of bacteria so far as discovered.

DR. MEADER—Dr. Owens is correct as to the number of bacteria. Pathogenetic bacteria, when present in sufficient numbers will, however, produce a soil suitable for disease.

SENEGA IN THE TREATMENT OF COUGHS.

BY C. S. AMES, M.D., ADA, O.

The object of this brief paper is to call attention to a remedy whose indications are frequently overlooked. We all find that there are some remedies which are usually curative when fairly well indicated, while otherwise often fail. Now, senega belongs to the reliable class, although not as often indicated as many others.

In the treatment of all diseases attended by cough, the characteristics of the cough and expectoration are usually important factors in choosing the remedy. Cough, of course, is only a symptom, but often so prominent as to demand special treatment.

Senega has a characteristic cough and expectoration, and there seems to be a characteristic senega subject. Usually kali bichromicum is prescribed for all cases where there is a stringy expectoration, and it very often fails, because it is not the real simillimum, and does not cover the totality of the symptoms.

Briefly, senega is indicated by a hard, forcible, expulsive cough, attended by an expectoration of a clear, stringy, tenacious mucus. The mucus is adhesive. It clings to a paper, and hangs in strings or in a mucilage-like mass, and is usually covered with a frothy, white mucus, due to admixture of air with some of the mucus.

There is often a good deal of rattling of mucus in the chest. The cough is necessarily severe and expulsive in order to dislodge the tenacious mucus. There is usually a good deal of pain and soreness, both in the lungs and in the muscles of the chest. Sometimes the patient complains of weight or pressure upon the chest, pushing the lungs back. The senega subject is fat and flabby, but that is secondary to the other indications.

I have used senega principally in the treatment of the bronchitis and broncho-pneumonia of the gripe. In a number of severe cases it did efficient service. Three years ago senega saved a severe case of catarrhal-pneumonia, following a neglected attack of the gripe.

The patient, a farmer, fifty years of age, had an attack of the gripe, and continued to work and expose himself until an extensive catarrhal-pneumonia developed. He was chilly for twenty-four or more hours, but had high fever, very severe cough, and the prostration was marked from the beginning. The hepatization began at the lower posterior part of both lungs, and gradually extended forward and upward, involving a large portion of both lungs. I treated him with different remedies the first few days as seemed best indicated, but he gradually grew worse. The expectoration became very copious and stringy, and I gave kali bichromicum without any result. The cough was very hard, painful, and almost incessant. There was great soreness about the chest. Seeing a quantity of the expectoration upon a paper, I noticed its clear, tenacious character with the foamy crest, and I gave him a dose of senega. In about one-half hour the cough became less frequent, and by the next day he was much better, and made a good recovery. The fever continued for several days, but each day he was better. He was physically a typical senega subject. It was a very serious case, and I have always watched for senega indications in similar cases, and when found it helps.

I use the first and second decimal dilutions, usually fifteen to thirty drops in one-half glass of water, a dose every one to two hours.

The expectoration, when senega is indicated, is stringy, but it is more tenacious and usually clear, like the white of egg, and runs together in a gelatinous mass. The expectoration of kali bichromicum is ropy, stringy, and yellow or white, and often purulent.

There is one condition in the second stage of coryza in which I find senega curative. It is when there is a rather scanty viscid mucus that dries down to a pasty consistency upon the nasal mucous membrane. In the case of a lady subject to such attacks, the third dilution has given prompt relief each time. The patient had a distressing dull pain in the forehead and face. I have prescribed senega in a few cases of whooping-cough this spring where it seemed to be indicated, and with some benefit, but coccus cacti did more good where there was copious vomiting or expectoration of clear,ropy mucus. The indications are very similar.

Incidentally, it is well to remember that coccus cacti is the remedy where whooping-cough is attended by scanty or irregular action of the kidneys, as occasionally happens. It promptly relieved a severe case where the usual remedies, both for the whooping-cough and the suppression of urine, had entirely failed.

Senega is recommended as a palliative in some cases of phthisis by some writers.

My observation has been that senega is most frequently indicated in the second stage of bronchitis and broncho-pneumonia, in the bronchitis of the aged, and in the exacerbations of the bronchitis, which usually attends chronic emphysema. In such an attack, occurring in the worst case of chronic emphysema that has ever come under my care, the remedy gave great relief, and there was less difficulty in breathing for several months.

SOME CONFIRMATIONS.

BY JNO. A. THOMPSON, M. D., McCOMB, O.

CANNABIS SATIVA.

Mr. J. B., age fifty-seven, a good eater and much addicted to coffee and tobacco, presented himself with an anomalous heart affection—palpitation, dyspnoea, and praecordial pain—at times very severe. He had been the rounds, and only came to the homeopathist as a last resort. An attempt was made to correct some of his habits, and careful prescriptions were made, but little benefit

was received, and the patient, in disgust, declared, "I tell you, doctor, I have dropsy of the heart; I can feel the water dropping from the end of it." "*Sensation as if water were dropping from the heart*" was found under cannabis sativa, and the sixth potency made a rapid and permanent cure of this case.

HYOSCYAMUS—ARGENTUM NITRICUM.

Mrs. D., age nineteen, married one year, was confined December 18, 1890. Labor was in every respect normal, and lasted but five hours, terminating at noon. During the afternoon she was cheerful, and felt so well that she could not "see the sense in lying abed." At 6:30 p. m. I was called in great haste, to find my patient writhing in the most horrible convulsions. The seizures occurred at intervals of twenty minutes, and lasted from five to eight. Belladonna seemed to be the indicated remedy, and was given in the third potency. The seizures became less violent and the intervals lengthened. At 3 a. m. I left her to get a little rest. On my return, at 7 o'clock, I found that the convulsions were in every way worse, and, to add to my perplexity, the patient had become a raving maniac. Two strong persons were required to keep her in bed, while the room resounded with oaths and curses. The husband and the neighbors demanded counsel. No homeopath was available, and one of my "regular" colleagues was called in. His prescription—a mixture of chloral and potassium bromide—was given, the only apparent effect being that, after a few doses, the patient resolutely declined to swallow. My colleague declared, "what's the use, she'll die anyhow," and abandoned the field. At this time the patient changed the method of her madness. She no longer struggled to get up or escape, but *evinced a determination to throw off all covering*. There was no lasciviousness either in word or deed; she seemed oblivious to all around her, *but was determined to lie naked*. After the next convolution, as she lay stunned and almost lifeless, I cleansed the blood and foam from mouth as best I could, and dropped a few drops of the sixth potency of hyoscyamus upon her swollen and bleeding tongue. The effect seemed almost instantaneous; and, after two more doses, given in the same manner, the insanity was gone. Convulsions, however, continued at intervals of about thirty-five minutes, and were fast exhausting the poor woman's vitality. I was now able to note that after each seizure she would lie almost lifeless for ten or fifteen minutes, *then would begin a distressed restlessness that ever increased until the onset of the next convolution*.

This called for *argentum nit.*, and hurrying to a drug store I procured a grain of the salt, placed it in a one-ounce bottle, and with a little rain water—for want of better—raised it to the 6x, the druggist being an amused spectator of this “bottle-washing” process. Returning to my patient, I gave this hastily improvised remedy in drop doses every fifteen minutes, the result being a prompt cessation of the convulsions, and a lying-in that gave no further trouble.

LYCOPODIUM.

Mrs. J. C., age 76, recently widowed, had been ill for two years, and, being wealthy, had received the most solicitous care of her “regular” physician, who finally announced that he could do no more.

I found the old lady with an enormously dilated heart, an enlarged “nutmeg” liver, and intense albuminuria. Anasarca was universal; cellular tissues, peritoneum, pleura, pericardium, cerebral ventricles, all full; stupid, cyanotic, almost comatose, and bloated till she scarce resembled anything human. The poor old soul sat upon the side of her couch—recumbence had been impossible for months—patiently awaiting the finishing stroke. Her family, however, were not so resigned; they wished her rallied long enough to make a will.

Arsenicum 2x trit. every hour did this service for the poor woman, or, rather, perhaps, for her legatees, but the good effect could not be sustained. I then resorted to a remedy that, just at that particular time, was being much lauded—the distilled extract of *apocynum canadensis*. This seemed to restore to a degree a long-lost appetite, but did no other noticeable good, and my patient, after two weeks of treatment, was rapidly relapsing into an utterly hopeless condition.

Visiting her one morning I was informed that her *limbs had burst*. That they were “*leaking*” was evident enough, a large blanket beneath her feet was saturated with the escaping fluid, but examination disclosed the fact that the limbs, which, from the first, I had kept well bandaged with flannel, had not ruptured. The left leg, which was doing all the leaking, had years before been badly scalded with some dye stuff. The scar tissue left by this mishap had broken down, leaving a number of superficial ulcers, from which there was a continual drip, drip of water.

Under *lycopodium* we have the symptom “*oozing of water from sores on the feet.*” These sores were on the leg, rather than the foot, but I was at my wit’s ends, and in sheer desperation gave ly-

copodium 12x trit. every three hours. For a week I waited, my patient barely holding her own; then the urine, which had got down to six ounces per diem, all of which solidified on boiling, began to slowly increase, general improvement set in, and at the end of six weeks my patient was about the house. For two years she enjoyed comparative health, but finally died from old age and general breakdown, without any marked return of the dropsical condition.

HYDRASTIS.

Mrs. E. M., aged sixty-eight, ill for five months. She had coffee-ground vomiting, intensely sour, much pain of varied description and intensity in the stomach, but the trouble most complained of was an "all-goneness" in the gastric region, that was so severe many times a day as to almost cause syncope. Objectively, the epigastric region was indurated and nodulated over a space as large as the hand, the whole anterior wall of the stomach seemed to be adherent to the abdominal parieties, the skin of a dark, purplish hue, and exfoliating in scales. If this was not scirrhus of the stomach I never expect to see a case, and my prognosis was rapid perforation of the abdominal walls and—death. At the request of the patient I looked about me for something to relieve the sinking goneness at the stomach, that she declared was harder to bear than her pain. *Dull aching pain, causing a faintish goneness of the stomach*, we have under hydrastis, and, looking farther, I found it recommended for cancer of the stomach. With very little hope of benefit, hydrastis in drop doses of the mother tincture every two hours was given. To my astonishment improvement was prompt, continuous, and rapid, proceeding to almost complete recovery. This patient lived for eight years thereafter in comparative comfort, and finally died of chronic bronchitis, which had troubled her for nearly half a century.

The lesson I have learned from the experience here given, and much more of its kind which has fallen to my lot, is one of confidence in our *materia medica*. Of late there have been those in our profession who have done and said much to discredit our *materia medica*. Profound discrimination and the higher criticism have been applied to pathogenesis in a way that, to say the least, has been calculated to produce uncertainty and indefinite distrust in the minds, at least, of the younger and less experienced. Whether the good accomplished will outweigh the harm done remains yet to be seen. The lessons of clinical experience have confirmed me in

the faith the great mass of the homeopathic *materia medica* is as reliable as anything human. Reform in pathogenesis may be well enough for the few who possess supernatural powers of discrimination, but the masses of the profession will do well, in my humble judgment, to carefully study and conscientiously apply our *materia medica* just as it is. Cover the totality of symptoms if you can, trust your stool to three legs if you have them, but "go it on one leg" if you must! You will often be pleasantly surprised at the results.

DISCUSSION.

DR. BECKWITH—I think that paper is one to be especially commended, because it is practical and useful. As these papers are all here for discussion, I would simply give my experience in a case which might be described as a belladonna case. If the similar case described by the author had been my case, I would have given the thirtieth of belladonna. I have seen wonderful effects from it, and many cases controlled almost instantly. In the case of hydrastis I beg to differ with the author. I think if he had studied ulceration of the stomach and the symptoms of hydrastis he would have found it applicable.

DR. OWENS—In regard to the *hyoscyamus* case, I have had some experience with that drug in puerperal convulsions. When I was in Cleveland attending lectures, and demonstrating anatomy for the homeopathic college in '52, I encountered a man named Barret, who took me across the river to see a case of convulsions that had come on after confinement—four hours after. The lady had been comatose twelve hours. He had prescribed *hyoscyamus*. He was a pretty high dilutionist; he gave the thirtieth. We watched the case for two days, and the woman came out all right. Since that time I have had some experience of my own. About six years ago I encountered a case of that kind. When the convulsions came on after confinement I used *hyoscyamus*, the tincture, ten drops in a glass two-thirds full of water. She had been twelve hours in this state when I was called in consultation. I gave her ten drops of the tincture of *hyoscyamus*. The result was that in two days that woman was quiet and relieved, and in one week her mind was as clear as it ever was. Very recently I was called in consultation in another case. After the confinement the convulsions came on. She was collapsed, and had been so for several hours when I saw her. I gave the tincture of *hyoscyamus* again,

because I happened to have it in my case. I asked the gentleman about the case since, expecting to be told she was dead. He said she was all right. I have found no good from hyoscyamus if given before the confinement, but after confinement, from one to six hours, the results have been in every case where I have used it very satisfactory.

DR. BECKWITH—I would like to know why Dr. Owens, who had received a homeopathic education in this city, has drifted back to eclecticism, for he says that instead of the thirtieth, which he gave in the first case, he gave ten drops of the tincture.

DR. OWENS—I did not give the thirtieth. That was given by the physician who had called him; and, as stated, this physician was a very high dilutionist. But further than that, it is not the size of the dose, but the simillimum which cures. I happened to carry the tincture in my case, and would have given it in any strength.

DR. J. H. WILSON—Don't spasms get well after confinement, any way?

DR. OWENS—Spasms quit immediately upon giving the indicated remedy, and, therefore, it was fair to assume that it was the remedy which worked the change, and not the limitation of the convulsion.

DR. R. B. JOHNSON—I have had some experience with hyoscyamus also. Some four or five years ago I attended a lady in the morning, and in the afternoon I was sent for because she was in convulsions. She acted very strangely during the confinement. She would answer all questions correctly. I was misled in her case by that; but when I was called in the afternoon she was in convulsions, and I would ask questions, and she would answer them correctly, although just coming out of convulsions. You will find that symptom in hyoscyamus. I gave her hyoscyamus the third, and she had no more spasms and made a good recovery. Another case. Some five years ago I was called in consultation, some twelve miles out in the country, to a case of convulsions before confinement of about seven month's of pregnancy. The urine was almost solid albumen when it was heated. We corrected that. We stopped those convulsions with belladonna, and she went on to her confinement. After three or four days she went into convulsions again. I again asked her questions, and she would answer them correctly every time. I put my thinking cap on to find where the remedy was, and it struck me hyoscyamus was the remedy. I gave it her, and she had no more spasms and made a good recovery and is living to-day. I used the third potency.

ACONITE AND VERATRUM VIRIDE.

BY A. W. REDDISH, M. D., SIDNEY, O.

Aconite is a protoplasmic poison, and destroys the functions of all nitrogenous tissues. It has an especial affinity for the sensory nervous apparatus. It is by destroying the conducting power of the afferent nerves whereby sensations are carried to the vaso-motor centers in the medulla, or by direct action upon the vaso-motor centers themselves that it paralyzes the arterial capillaries, and produces congestion and inflammation of every tissue supplied by capillary vessels. By this same sensory paralysis aconite produces anæsthesia of the whole body, with coldness, numbness, and tingling. The motor paralysis produced by this drug is only apparent, and is always accompanied by sensory disturbances. The apparent motor paralysis is brought about by a destruction of reflex action. The congestion and inflammation of the lungs is produced in the same manner, viz., by paralysis of the afferent branches of the pneumogastric. Thus it seems that aconite spends its force upon the posterior columns of the spinal cord, and upon the spinal filaments of the vaso-motor system.

Veratrum viride also belongs to the cerebro-spinal group, and spends most of its action upon the pneumogastric nerves, but influences also the spinal filaments of the vaso-motor system. No drug in the *materia medica* produces such profound paralysis of the whole circulatory apparatus, and this leads us to believe that its grand center of action is upon the medulla, which is the nervous center of the vaso-motor system. By its paralyzing action upon the pneumogastric veratrum, produces congestion and inflammation of every organ and tissue supplied by it. Thus aconite spends most of its force upon the spinal filaments of the vaso-motor system, veratrum upon the pneumogastric.

Veratrum produces more complete paralysis of motion. Aconite, acting upon the posterior portions of the spinal cord, produces disturbances of sensation, while the motor paralysis produced by it is only apparent, and is always accompanied by sensory disturbances.

Aconite affects all of the structures of the heart, nerves, ganglia, and muscles, but its action can mostly be accounted for by its paralyzing action upon the cardiac ganglia, thus destroying its rhythm.

Aconite is the homeopathic lancet, and is unique in its action. It has no action upon the blood, and is, therefore, of no use in septic fevers, as typhoid, typhus, intermittent, gastric or hectic, variola, pyæmia or diphtheria. It may be used in measles or scarlatina when of a sthenic type. Aconite will do little for symptomatic fevers. Where, then, is aconite's sphere? In synochal or pure inflammatory fevers, with no touch of sepsis about them. In rheumatic inflammations, pleuritis, pneumonia, croup, and tonsilitis. Congestions must show an actual increase of temperature to suit aconite. Tension of both nervous and arterial systems go hand in hand with aconite. It is useful in cardiac inflammations if of rheumatic origin, increased action, left side involved, distress, and in uncomplicated hypertrophy, where no valvular murmur exists. In palpitation, where the heart retains its vigor, anxiety, cardiac oppression, and even syncope; intense pain extending down left arm, with numbness and tingling in fingers. The pulse of aconite is full, hard, and bounding.

The fever of veratrum is accompanied by intense cerebral congestion, injected eyes, delirium, and spasms. The congestion of the lungs is sudden and intense, blueness of the skin, oppression in breathing, full, hard pulse, and dilated pupils. The congestion is more intense than in aconite. I believe I usually give veratrum for its physiological action in this type of fevers. In pneumonia aconite is indicated by a hard chill, high fever, characteristic full, hard, bounding pulse, and hot, dry skin, engorgement of lungs, and the expectoration which is serous, watery, and little blood-streaked (not thick and blood-streaked), anxiety. These attacks are violent and sthenic.

The croup, the colic, and the diarrhoea of aconite are all inflammatory. The former caused by cold, dry winds, and the latter by suppressed perspiration. The blood vessels are engorged and the stools are often blood-streaked. This is similar to ferrum phosphoricum which has, in addition, a full, soft pulse, not as bounding

as in aconite, and the symptoms are not as active. I have found aconite quite frequently indicated in acute neuralgia of the trigeminal nerves, occurring in cold weather. If, in a post-pueperal case, you find the pulse one hundred or above—full, hard, and bounding—the woman is already bleeding or soon will be. Aconite in these cases acts admirable.

The brain symptoms of aconite are produced by the fever, and not by direct inflammation of its structure, such as belladonna produces. The synochal fevers, as we often see them in children, begins with an initial chill, dry heat follows, which continues until sweat brings relief, and the fever is over, so far as aconite is concerned. When heat or cold paralyze the circulation give aconite.

Veratrum prostrates the cerebellum, medulla, and antero-lateral columns of the spinal cord. Belladonna produces congestion by exciting the cerebral functions. Strychnia also acts in an opposite method from veratrum, and excites the motor spinal nerves and centers.

Veratrum is one of the few remedies that produces congestion, inflammation, and spasm of the œsophagus. On the stomach it produces inflammation and the secretion of a large amount of ropy mucus, long-continued nausea and vomiting from irritation of the filaments of the pneumogastric. Veratrum has little effect upon the bowels. It produces spasms from direct irritation of the brain. Aconite rarely produces spasms, but a chill is a constant accompaniment of its action.

Thus, the points of differences are greater than the points of similarity between these two great remedies.

DISCUSSION.

DR. WM. OWENS—The author states that the vaso-motor center is in the pons varolii and medulla oblongata. How is it that animals that have neither of these have just as good a circulation as a man, and such animals as have pons varolii and medulla? He further affirms that this same aconite exerts itself chiefly through the pons, and yet he also affirms that the nervous sensations come from the posterior columns of the cord, and that these are the ones

probably affected by it. The pons does not touch either the nerves of sensation nor the posterior columns of the cord. Neither does the medulla oblongata touch either of them. His application of aconite is a contradiction of physiological facts.

AQUA PURA.

BY F. C. STEINGRAVER, M.D., BLUFFTON, O.

From time immemorial man has searched over the mineral, vegetable, and animal kingdoms for remedies to prevent and cure the many ills to which his frail body is subject in this mundane sphere. With great pains he has proved these remedies on the sick and on the well, and recorded his findings in great volumes, called *materia medica*. But, strange to relate, there is one therapeutic agent whose sphere of action, both for the prevention and cure of disease, is second to none; whose power for the relief of pain and distress of all kinds is scarcely equaled by any other agent, yet it is never even mentioned in many works on *materia medica*. While it is true that it cannot properly be classed as a drug or a medicine, yet that it is a remedial agent of great power none will deny that have ever used it. This agent is simply pure water used in varying degrees of temperature.

If applied to the head, either cool or cold, it will often speedily relieve headache, delirium, or unconsciousness, if caused by fever, inflammation, injury, or congestion. Applied in the form of hot, moist clothes in neuralgic pains in any part of the body, they are often speedily relieved or dispersed. Taken into the stomach in sips, as hot as it can be swallowed, nothing equals it for the relief of nausea and vomiting from gastric irritation. Taken in the same way, or, if used to wash out the stomach with the stomach tube, it will cure gastric catarrh, by washing away the vitiated secretions, and stimulate the gastric follicles to the secretion of normal gastric juice. Taken in large quantities, lukewarm, it serves the purpose of an emetic, unloading the stomach of poisonous or indigestable matter; and, by continuing its action, it serves as a laxative and di-

uretic, removing noxious substances from the intestines, and freeing the uriniferous tubules and bladder of deposits of calculi, earthy phosphates, uric acid, etc.

Perhaps the citation of a few cases will show its beneficial effects when used in the form of the wet sheet pack.

CASE No. 1.—Little girl, aged four years; had been sick with scarlatina for a few days; temperature rose higher every day; eruption failed to fully appear. On the fourth day there was almost total suppression of urine, and convulsions set in and, in spite of the use of apparently well indicated remedies, the disease threatened to speedily terminate our little patient's existence. We immediately wrapped her up in a sheet wet with cold water, and covered her up well. The result was that in fifteen minutes the convulsions ceased, and in one hour the eruption appeared fully, the secretions were reestablished, and the threatened calamity was, for the time being, averted. Although we had to use the same means on the three days following to combat convulsions, which reappeared on the same hour each day, patient recovered.

CASE No. 2.—Hattie W.; aged 12 years; had had fever for two days. When called on the evening of second day of fever, found patient comatose, with restlessness and muttering; delirium; temperature, 105; did not wait for the action of a dose of aconite which I gave, but immediately applied the cold, wet sheet pack, and in one hour patient was rational, temperature reduced to 102, skin moist, and patient made a good recovery.

But why multiply cases? Suffice it to say that in fevers of all kinds, accompanied or not by convulsions, etc., I have always found the cold, wet sheet pack the best and quickest means of relief that I could use.

The use of water in varying temperature for baths, as a hygienic measure and therapeutic agent, is familiar to all and need not be recapitulated here. There is one other way in which water can be used with great benefit in many cases, and that is for the purpose of flushing the colon and rectum. When we understand that within the grasp of the anal sphincter, and in close proximity to the rectal walls, we have many of the terminal branches of the sympathetic nerve within easy reach, and knowing that by simply dilating the anal sphincters, thereby releasing their grasp upon these nerves, we can resuscitate the asphyxiated from drowning,

chloroform narcosis, etc.; that by these means we can stimulate the whole nervous system, causing previously cold extremities to become warm; that by the application of an irritant, like the tincture of capsicum, to those nerves, we can often arouse a person narcotized by opium or morphia when all other means fail. These being facts, how easy it is to understand that the harmful effects that may be produced by the retention of faecal matter, with all their poisonous gases, bacteria and their ptomaines and toxines pressing upon those nerves, and by absorption being carried into the general circulation and producing deleterious effects upon every organ of the whole body. How easy, how simple, how rational it seems, when we understand all of this, that we should come to the conclusion that the best way to overcome the trouble would be to clear it all away by flushing the colon and rectum with water.

"Man prays to his Maker to lengthen his days,
While the laws of his being he seldom obeys."

For ages he has laid great stress upon the importance of bathing and keeping the skin clean, which is all right as far as it goes, but the foulest cesspool of his body is left uncleanned, unnoticed, and undisturbed from the cradle to the grave, except often through the taking of laxative or cathartic medicine, which relieves for a time, but in the end only makes a bad matter worse, when all might be avoided and overcome by the use of nature's bountiful remedy—water.

In every case of labor I throw from a pint to a quart of hot water up the rectum, provided the presentation has not advanced too far to prevent. Besides cleaning out the rectum, this will stimulate the uterus and promote stronger contraction in languid labors, or reduce tension in lingering ones. While it is thus demonstrated that water is at least a great adjuvant in the prevention and cure of disease, its use does not interfere with the action of any other remedy, but, on the contrary, it renders their action more certain and rapid, and hence it is, in nearly all the acute diseases and in many chronic ones, the most useful, and in many the only one we need employ.

DISCUSSION.

DR. MAXWELL—I want to say that I have verified the use of water in the way of colon flushing and cold packs in my practice for a number of years, especially in typhoid fever, flushing the colon at least once a day and giving the cold baths, usually sponge baths, as often as when the temperature reached 102. In my own practice I have never lost but one case of typhoid fever, and I know I have had some that were as severe in their character and as complicated as you usually get. The one case of typhoid lost was a child of poor parents, who had been convalescing but took cold and contracted pneumonia and died in about two days. So that in my entire practice I never lost a case of typhoid fever, and I attribute my success to the use of the colon flushing and the cold baths and but very little medicine.

DR. WATTS—I would like to know what the Doctor does in a case when the temperature persists in standing at 102 for weeks. Does he keep them in cold water all that time?

DR. MAXWELL—I will answer that by saying that within the last two months I have had three cases of typhoid fever which started in with a temperature of 104, and two of them reached 105, and another 105 $\frac{1}{2}$, two of them had pneumonic complications. After beginning the colon flushing and the sponge bath I never had their temperature go up and stay up for but a short time. As soon as the temperature rose to 102 my instructions were to the nurse to give a bath, and sometimes in a very short time it would creep up above 102, but when it got to that height the nurse, without further instructions, gave a cold bath and always reduced the temperature to the normal point inside of an hour.

DR. T. P. WILSON—As the society voted so overwhelmingly for the reading of some of these papers, I suppose they will be also desirous to have them discussed. So I cannot ask anybody's pardon for rising to make a few remarks upon the bureau as a whole, which has been fittingly closed by general statements well condensed and thought up by the chairman. One gentleman has well remarked that if we have come here for anything, it is to learn something about *materia medica*, as that seems to be the center wheel, or the source of power of all our professional work. If we don't know something about *materia medica* we don't know anything. Now, what have we learned about *materia medica* in the report of this bureau? I haven't the report in hand to look over, and I will not attempt to go over all that has been presented, but this thought came upon me that we, as a school, have accepted certain principles of *materia medica* that are not to be overthrown; yet we come

here year after year and reiterate them as though they were still in doubt or under judgment. Every man has to get up and moralize and philosophize about it, and goes over the general principles that ought to be put up somewhere where they could be seen—nailed up on the wall—and then stop this eternal ding-donging about the principles involved in the *materia medica*. There are very few principles that require any further attention or debate. We all know where our *materia medica* came from and all that. Now, to my mind, I have heard but one paper that has seemed to come up to my idea of what this audience needs and desires above all things else, and I rise to say that I appreciate that paper very fully indeed. I refer to the paper that Dr. Thompson read. That was an able paper, and a model paper, in that it just reached exactly the wants of every man who pretends to be a homeopath. He didn't stop to generalize. He has plunged in *medias res*, and picked up his remedies and showed his cases by way of practical application. As, for instance, in the case of *lycopodium* and the other remedies—I do not recall them at this moment—but from these cases there is more to be learned in practical points than by all the long-spun theories that you can find this side of the gates of heaven on the subject of *materia medica*. Let us go to work and point out some practical business. The gold is here and the silver is here and the other precious metals are here. Why don't such a man as Dr. Beckwith or Hinsdale, or these other gentlemen here, come up with something that is made, made, made, so that we can see the shape and quality and profit by the pattern. We hear that *nux* is a great spinal medicine, and a great sphincter remedy; that it is excellent in spasms and a hundred and one other generalizations. *Hyoscyamus* will do this, that, and the other, but always in a general way. We have heard that in that way until we are tired of it. Tell us of a case of *nux* that was cured and how it was done, or of *hyoscyamus* and how that was cured. Make it so plain that a man, though he be a fool, couldn't make a mistake about it. Allopaths don't understand our generalizations, neither do our patients. But you read them a paper full of facts like that contained in the paper of Dr. Thompson, and you can make converts and friends to our cause.

DR. GEOHEGAN—I think that if Dr. Hinsdale will come to us next year with a definite plan for making provings, one that shall be uniform and remove the element of doubt that now hangs about so many of our remedies, he will be filling a long-felt want. I think it is about time we formulated some definite plan and presented it to the society or the Institute, and commenced work on it. It would pay us much better than isolated cases of provings. What we need is a school of provers.

DR. WATTS—What this audience wants is information that will help them to cure their patients, or that will relieve them from pain. That is where we have the advantage over the old school. Our remedies have been proved and found to be reliable when used on certain symptoms. What we want is for Drs. Owens, and Beckwith, and Wilson to come here and tell us something of practical value, something that can be relied upon every time; what lycopodium and hydrastis and the other remedies will do in doubtful cases.

DR. FAHNESTOCK—We haven't heard half enough of the things that aconite will do. We are just beginning to know what aconite will do. We don't know our story half well enough. Surgery is all right enough in its place; but we must cure without the knife.

DR. HINSDALE—I suppose the members of the bureau took it for granted that the members of the society have in their possession the same books and the same lists of provings that they themselves have, and it seems to me like carrying coals to Newcastle for any member of this society to expatiate upon what was as well known twenty years ago as now. If you are not familiar with the provings of nux you can read it in some book. It is to be found in any number of books. My idea of the deliberations of a society is to talk about important matters, theories, and plans that still need to be exploited. So great was Dr. Wilson's interest in Dr. Thompson's paper that he did not remember but one remedy mentioned in it, namely, lycopodium. He had forgotten all about cannabis and hydrastis. That was all the good that paper did him. I maintain to-day that if we wish to pose as a progressive school of medicine, as a progressive body of physicians, we must go forward. There are herbs growing at our feet, and there are substances known, that may be made into valuable remedies. We should make tests, have provings instituted, and thus build up a thoroughly reliable *materia medica*. Two years ago in my clinic I made what I called a pretty thorough test of bacillinum. Every patient who came there and presented the consumptive symptoms was given bacillinum every Saturday. In the meantime they had blanks, and every one of them died the next spring. We hope to do something with it and accomplish something. I am not saying that it proves anything that those six died; they might have died anyhow. It may have been predestined that they should die about that time; but they are simply indications as to what failures have been encountered by the use of that drug. I have thought since it is all over with that in those cases that died we were not wholly without criminal blame for neglecting them by testing this drug upon them—a drug that had not been pathogenetically worked

out; and that if we did any more experimenting of that kind their blood would be upon our heads.

DR. T. P. WILSON—I think I have the right to say that Dr. Hinsdale did not exactly represent me correctly. I don't suppose he intended to do this; but it is very obvious to my mind, seeing that he has gotten up here, and whatever he has made of me he has made an ass of his style of doing business. He reports a certain number of cases treated with a remedy, then he derides his own work by killing them all off. I want to call his attention to the fact that Dr. Thompson's cases were successes, and I advise him to abandon his method by which he has met with so many failures, and adopt some other way by which he can have some measure of success.

DR. WUNDERLICH—I think if we had more papers like Dr. Thompson's we could learn something that is practicable. That reminds me that an allopathic friend of mine asked me what was in our *materia medica*. I loaned him *Cowperthwaite*. He had it about two months. He brought it back and said there wasn't a man's brain big enough to remember all that is in that book. That's the trouble. That reminds me of a case—a child with convulsions. It was very sick. I had one of the most prominent physicians as counsel, and the indications of that child's symptoms all indicated belladonna. I gave him belladonna all day. The little fellow was coming out of one convulsion and going into another one, yet belladonna seemed indicated. I gave the third. Then we went higher. This other doctor said it is a clear case of belladonna; keep on with the belladonna. That little fellow got worse. In the evening I thought he would die. Well, while sitting there I noticed he would come out of a spasm, then he would groan and groan. During the day the family got scared and called in an old school physician, who gave chloral and bromide of potash. It was like Dr. Thompson's case. Then I was called back. This little fellow kept getting worse. I noticed that he would sneeze. I thought that was in *ignatia*. I found it there. I gave him two doses, and the little fellow went to sleep, and there was no further convulsion. I gave him belladonna because it seemed indicated, and because counsel recommended it. But the child would have died under belladonna. I gave the *ignatia* and he recovered.

DR. MAXWELL—if we understood our *materia medica* better we would not need hypodermics of morphine. It is not the fault of homeopathy, but it is our fault that we don't understand our remedies well enough.

DR. OWENS—It is not always the name of the drug, nor the

drug itself, that produces the desired result. The point is this: Drugs have a relation or affinity for certain tissues and certain organs of the body, and we ought to study drugs in reference to that relation. We find that belladonna has a special relation to the mucous membrane; we notice that when taken into the mouth it causes a dryness of the mucous membrane. That furnishes us an indication for the dryness of mucous membrane for which belladonna is to be given. We notice that another drug has a special relation to the glandular system, as, for instance, the iodides, and we ought to study them in that relation. If we study a drug with reference to the tissues we will find that the tissues always give us a group of symptoms which correspond to a certain morbid process. If the drug produces a certain symptom of the body, or upon the mucous membrane, or gland, or any other portion of the circulation, that is the drug that will meet that condition. If we study without reference to the tissue involved we will be going blindly almost the whole time; but if we regard the tissue changes we will make no mistakes in selecting the drugs. It is for this reason that every tissue yields a group of drug-symptoms which are unlike all other symptoms. Thus, you never have burning pains in the interior of an organ, unless it has a mucous membrane into the interior of the organ itself. You seldom, if ever, have a stitching pain in pure inflammation of the mucous membranes. You never have sharp, stitching pains in the interior of the liver unless there is an abscess forming there. Before you have a history of that, that is sufficient of itself to indicate the remedy. You never have certain rhythmic motions of the body without the non-striated or white tissue is involved. You never have rhythmic movements of the glands or muscles, and whenever you have rhythmic movements in the body you may be sure there is some white tissue involved. You never have rhythmic movements in inflammations of the muscular system. You only have them, as I say, associated with the white tissues of the body—with the white tissues of the alimentary canal, with the white tissues of the bladder, of the uterus, of the stomach, and so on. These always yield rhythmic movements, with aching and pressing symptoms, as long as it is confined to that tissue. You must select your remedy with reference to that, and when that drug is administered it will give you prompt results. Names are nothing.

DR. JOHNSON—We need more provings of our drugs. We need more common sense in the application of such drugs as we already have. Do you want more provings of aconite, of nux, of arsenicum, or any of these drugs? You have had the provings for a century or more; why not get down to work and study these prov-

ings? Study your *materia medica* and absorb it into yourself. You will find in every remedy some leading key-note that will guide you; and when you have three legs to your stool you can stand on it better than you can upon one leg. There is always some leading characteristic in a remedy. Then you will become successful as a prescriber.

DR. J. C. SANDERS—In accordance with my own experience and observation, I have no doubt at all but what the excellent physicians who prescribed belladonna were correct—that it was the indicated remedy; but I am also very strongly impressed that had they continued belladonna in the potency in which it was being administered they would have had a funeral on their hands. Now, my idea about that case is this—and I am unwilling to let it pass—that had he given the belladonna in a high potency—a very high potency—he would not have had the experience of that irritation having been kept up, as it seems to have done, all night and all day. He was giving belladonna in a potency that was sustaining the very phenomena that he was trying to allay. It was simply sustaining the irritation by virtue of this drug effect. I think that the stopping of it and the absolute arrest of its use had as much to do with the control of the convulsions as the giving of the *ignatia*.

DR. THOMPSON—In some respects the intent and purpose of my paper seems to have been misunderstood. There are ways and ways of studying *materia medica*; there are ways of generalization and ways of individualization; there are those who seek an *a priori* method of prescribing. My acquaintance among the younger members of the profession has led me to think that there must be some wrong done in the way of teaching in our colleges in that respect. The constant tendency seems to be to arm one's self with a certain number of remedies for certain diseases. Now, *a priori* prescribing is all well enough to a degree; but careful symptomatological prescribing is, in my judgment, a very decided improvement—a very great improvement. But the point that I wished the most to bring out in the paper was the clinical verity and validity of a few of the uncommon and little-known symptoms. I didn't know, in the first case, that there were any symptoms in the case that would have called for the administration of cannabis until I went to the trouble of getting the totality of the symptoms. But that one symptom was so clearly and so characteristically given by the patient himself without question that it decided my prescription, and the result justified the use of the means. That was the intent of the paper—to direct the minds of those at least who are no better informed than myself to the fact that even these lit-

tle symptoms that are so often overlooked and so very often misunderstood, if their physiological and etiological connection are not plainly in view—those symptoms are still valid, and under proper circumstances may justly lead to the curative remedy without any other assistance.

DR. MEADER—Instead of the plea for new provings I would like to state that modern methods of chemical research have brought forth new forces in disease. You take, for instance, kidney disease. The amount of urea plays a very important part in the whole situation. Now, such provings as we have that bear upon the elimination of urea give us but little, if any, light upon this subject. I think it is along this line of investigation that provings should be carried on.

TREATMENT OF SKIN DISEASES.

BY G. W. SPENCER, M. D., CLEVELAND, O.

The remedies used in the treatment of skin diseases must be for success, both constitutional and local. To intelligently prescribe for a patient afflicted with any form of disease of this class, a complete history must be obtained. Because of all diseases those of the skin have the most complex and far-reaching etiology, owing to the fact of the exposed situation and extent, intricate anatomical structure, and large blood and nerve supply of the skin; also, the varied functions, including secretion, excretion, absorption, sensation. Again, the skin is the end organ of a multitude of reflexes, both in receiving first impression and suffering from the deranged functions of almost every other organ of the body.

These facts make both the diseases and treatment correspondingly complicated. Therefore, it is impossible to definitely select remedies suited to a certain class of diseases, even if found to possess characteristics in common. For example, acne may be caused by gastro-intestinal derangements, menstrual disorders, nervous disturbances, age, drugs, and uncleanliness, either singly or more or less combined. After we have discovered the ruling cause and balanced the symptoms, the remedy can be traced with reasonable

accuracy. In the above-named disease we look towards *nux vomica*, *pulsatilla*, *sepia*, *ignatia*, *sulphur*, *lycopodium*, *hepar sulphur*, and *arsenic*, as among the remedies most beneficial.

Another example, simple erythema, characterized by hyperæmic spots, followed by more or less exudation, and, sometimes, formation of crusts, found often upon the faces of children whose hygenic surroundings are imperfect, or who are improperly fed; therefore, found among all classes of people. Correction of these conditions is the line suggested. In my clinic many of these are given only *nux vomica*, when diet and hygiene cannot be improved, with results surprising.

Eczema, comprising over forty per cent. of all the cases we have to treat in this country, presents itself in so many garbs and stages that the treatment necessarily covers a large number of remedies. This disease, as well as those mentioned, enjoys, if anything, a richer etiology. In the acute stages the most valuable remedies are *belladonna*, *rhus toxicodendron*, *apis*, *aconite*, *cantharis*, and *nux vomica*. In the later stages, when the disease assumes the chronic form, presenting pathological changes more marked, as dry, scaling cracks, bleeding and induration, such remedies as *arsenicum*, *arsenicum iodatum*, *thuja*, *natrum muriaticum*, *graphites*, and *petroleum* are considered. When general nutrition is clearly at fault, tissue remedies are useful. This indicates the method employed in all cases of skin diseases in selecting the remedies for internal medication.

Homeopathy promises much in this particular line of practice. The second method of medication and treatment; namely, local, should take an important place in our study of this class of diseases, for the following reasons: First. The skin, exposed as it is to external influences, causing merely local changes in structure. Second. Diseases due to constitutional causes are constantly being modified by external influences. Third. The skin, as an absorbing organ, makes it possible to introduce remedies into the circulation, as well as to produce a stimulating or emollient effect; also, to render it aseptic.

The causes producing local diseases are parasites, vegetable poisons, and filth, or carelessness in the care of the skin and expos-

ure. Parasitic diseases usually attack the hairy portions of the body, as this appendage furnishes a habitat in which they can establish themselves more securely. The treatment that seems the most efficient is the local use of antiparasitic remedies, such as bichloride of mercury, carbolic and salicylic acids, and sulphur, are the principal remedies of this class used, either in solution or as an ointment.

Removal of the hair is absolutely necessary in many cases to effectually reach the parasite, and in cases where they burrow into the hair follicles epilation becomes necessary.

The inflammatory diseases, as eczema and all forms of dermatitis, are much benefited by local treatment, which must be applied with the following objects in view; namely, to protect from extreme temperatures, irritation from dirt and from poisonous gases and germs by the use of antiseptics.

The last-named application is known to be almost indispensable to the dermatologist in all class of diseases, and to neglect it is to lose a most valuable adjuvant to successful treatment.

In diseases of the scalp, as seborrhea, alopecia, or loss of hair, the result of fevers, if any portion of the hair follicles remain, this treatment promises the best results.

The method followed by those who keep hair stores about town, of shaving the head and covering their work with a wig, is most reprehensible. Instead, render the scalp aseptic as possible by weak solutions of bichloride and carbolic acid, brush the remaining hair with the softest hair-brush, and lightly; if dry, use a very little pure carbolized oil, and expose the scalp to the air and light as much as possible.

Two objects are accomplished by this treatment, protection from irritating gases and germs, and a gentle stimulation of the capillary circulation.

The treatment must be governed by the pathological conditions of the skin as to whether it needs stimulation or emollient applications. In applying any local medication the surface must be first prepared for it by removing accumulated products of the disease that the surface may be completely exposed to the medication. The actual condition of the skin is of much more importance

than to name the disease. Etiology, also, should engage our attention more than the name. Many patients can establish a very correct history, and arrive at quite a positive conclusion as to the primary cause. Primary lesions must be looked after in all cases, as they often give the key to the remedy.

Finally, we could prescribe for this class of diseases as successfully as for any if we will give attention to the history and present conditions of our patients as closely as in other diseases.

RHUS TOXICODENDRON.

BY W. HOYT, M. D., HILLSBORO, O.

This is a small shrub, one to two feet in height. The common names are poison vine, poison oak, mercury vine, etc. It grows all over North America, and is often found along old fences, in the fields, woods, or uncultivated and frequently unexpected places. It is very poisonous to some persons, as thousands can attest from sad experience, while others can handle it without being in any way affected by it. Some persons are so sensitive that the wind blowing over it and then upon them several feet distant, will produce poisonous effects just as marked as from contact.

The best tincture is prepared from fresh leaves gathered from shady places in May and June after sunset on cloudy days. It has many provers and a large share of them have been such without their consent. Its symptoms are legion and clearly marked, and to the true homeopath are of almost incalculable value. Its action is felt on all structures of the body, but is most marked upon the skin, mucous membrane, and sero-fibrous tissues.

The primary action upon the skin is one of irritation and inflammation of great intensity, and when once realized is not likely to be forgotten or confounded with any ailment or poison, although it closely resembles vesicular erysipelas in appearance, and a physician, without previous history of the case, might find it difficult to differentiate between rhus poisoning and the latter disease, for

the inflammation produced by *rhus toxicodendron* seems to be of an erysipelatous character, or at least very similar, and the similarity to erysipelas makes it a very valuable remedy in that disease, and especially in the vesicular variety.

The characteristics of *rhus* are numerous and varied, but the one that seems to have been most emphasized, that of relief from motion, has not proved entirely reliable in my hands, and in some cases, where that symptom has been very prominent, I have failed entirely with it, and have been compelled to select some other remedy. It is probable that it has been more my fault in the selection than the fault of the remedy. We must not overlook the fact that one symptom, even if it is very prominent, does not make a case, but that we must find the perfect simillimum.

I believe its action in neuralgia has not received the attention its merits deserve. For neuralgia of the face and head, particularly if it starts from a decayed tooth or teeth, I know of no other remedy that will cure such a large per centage of cases. The following symptoms of the mouth have been relieved by *rhus toxicodendron*: Tearing, jerking toothache, often worse at night; better from external heat, but is so restless cannot remain in bed; is sensitive to cold, and symptoms are aggravated in cold or damp atmosphere, except mental sadness and restlessness, which appear to be relieved by walking in open air; swelling of glands and soreness of throat. The pains of *rhus* are of a tensive, wrenching, burning character, and frequently accompanied with a tingling, paralytic feeling, worse after midnight and after lying down; patient restless all of the time; pains are also aggravated after change of weather, and in damp, wet, or cold weather; cold, fresh air aggravates. Neuralgia of the above character in any other part of the body is usually relieved by *rhus*.

Probably there is no other remedy that will cure ailments which are aggravated by bad weather with more certainty than does *rhus toxicodendron*. It also acts well in rheumatism, with pains and soreness caused by straining or spraining parts, by lifting or over-exercise, also lameness and stiffness in all the joints, which is felt most when first beginning to move; patient also suffers most when in bed in those joints on which he is not lying. Ailments caused

by getting wet or being exposed to damp weather call for *rhus toxicodendron*, and a dose taken after such exposure will often prevent much suffering, and if the exposure is made while taking excessive bodily exercise the indications are all the more marked.

The mental symptoms, as given by different physicians, are: Anxious, sad thoughts, apprehensive, especially at night; feels inclined to weep and prefers solitude; fears that he will die or be poisoned; worse while in the house and better while walking in the open air; great restlessness and anxiety; cannot remain in bed; desire to commit suicide; disgust for life; absent-minded; mild delirium; dread of the future, and patient lacks confidence in himself.

Head symptoms: Giddy, confused feeling in head, with staggering gait; fullness of head, with feeling of downward pressure on forehead; sensation, as if brain were loose when shaking the head.

It also has peculiar eye symptoms: Inflammation of the eyes, with swelling and great redness of the conjunctiva and eyelids; the caruncula lachrymalis intensely red, like a piece of raw beef; erysipelatous swelling in and around the eyes; rheumatic iritis; meibomian glands enlarged; cilia fall out; eye ball feels sore when turning the eye or pressing upon lids; arthritic or scrofulous ophthalmia; sensation of guaze before the eye; vesicular eruption on eyelids, with a stiffness of lids, as if paralyzed; dimness of vision from the inflammation and agglutination of the lids.

Face symptoms: Erysipelatous swelling of the face, with high grade of inflammation, with smarting, burning and stinging; chronic suppurating eruptions of the face; herpetic eruptions; crusta-lactea, with thick crusts and secretion of a fetid, bloody ichor.

The above symptoms are only a small number of those belonging to *rhus toxicodendron*, but those given are of special importance and well worth careful study, especially in neuralgia, rheumatism, erysipelas and ophthalmia.

RAPID PRESCRIBING.

By O. S. ALLEN, M. D., PEMBerville, O.

It has been stated that the mass of our American people expect rapidity in prescribing, as well as the rapid execution of other business, and it is to be feared that physicians too often make the mistake of undertaking the treatment of disease without making the careful examination they should. This remark applies with force especially to the homeopathic physician, because upon his skill in finding out the cause and determining what remedies are indicated rests his success, financially and otherwise. Indeed, I claim that our existence as a separate school of medicine is justified only by our superior method of determining the indicated remedy by the totality of symptoms before us. This being the case, are we justified in rapid prescribing?

The founder of our school was very careful in this respect. It has been said that Hahnemann acquired his reputation in the treatment of chronic diseases, while we live in a different age and must hustle, to use a slang expression; but, although we to-day have knowledge of many things he did not or could not know of, there are none of us his superior in the treatment of disease surroundings considered.

How often do we see physicians who, when a patient presents themselves, ask them half dozen questions about different portions of their anatomy, and nothing in particular, and then proceed to deal out medicine, generally alternating, without having elicited a single fact. Now, I have no wish to quarrel with my brother who alternates, but the fact is, the more the case is looked into the less alternation there is. This fact of itself would justify us in taking more time in our examinations. There is no disease but what the true indicated remedy will prove a panacea for if within the limit of reason. People will and must die, but no one denies that proper medicine frequently saves life.

It has been said we are taught to prescribe rapidly. Not so. There is no true teacher of homeopathy but who tries to teach the

necessity of being thorough. On careful examinations and a thorough knowledge of our remedies we must anchor ourselves and we will be successful.

DISCUSSION.

DR. BECKWITH—For over thirty years I have been quite a regular attendant of State societies meetings, but I must say with all due respect to this bureau that it is one of the most interesting, and has presented papers of the greatest value to the busy doctor. I think Dr. Hinsdale deserves great credit for the energy he has displayed in bringing forward such an interesting bureau.

REPORT OF THE BUREAU OF SURGERY.

A. C. SCHEBLE, M. D., *Chairman*, Toledo
"Surgery of the Neck."

C. E. WALTON, M. D., Cincinnati
"The Significance of Abdominal Pain."

J. K. SANDERS, M. D., Cleveland
"Subperiosteal Resection of Bone."

T. C. MARTIN, M. D., Cleveland
"After Incision of the Rectum."

J. DEETRICK, M. D., Youngstown
"Appendicitis."

L. K. MAXWELL, M. D., Toledo
"Fracture at the Base of the Skull—A Case."

C. E. SAWYER, M. D., Marion
"Deformities and their Treatment."

SURGICAL DISEASES OF THE NECK.

BY A. C. SCHERLE, M. D., TOLEDO, O.

Second to none in importance as regards surgical diseases, the region of the neck furnishes many complex pathological phases. The generous blood and nerve supply, the numerous lymphatics, make this an important anatomical region.

The affections that find habitat here are so numerous that it is scarcely within the province of this paper to follow any detailed arrangement, nor to include all its diseases. Inasmuch as surgical interference is required in nearly all, it is essential that a correct diagnosis be made early, and this is not at all times easily done.

The neck is composed of a mass of muscles, connective tissues, arteries, veins, nerves, compactly arranged around a common center. The trachea, œsophagus, and the cervical vertebra, all endowed with essential functions, which, while singly not implicated in the pathological condition, may be wholly or in part suspended by encroachments of the growth or diseases.

Acute diseases of this region, from infection introduced through the mouth, as from a decayed tooth, a simple ulcer, or abrasions of the most simple kind, are openings through which noxious substances find entrance, and are carried on into the blood and lymphatics and establish serious, if not malignant, affections of the neck and parts adjacent. This certainly must be the history of tuberculosis. We know that tonsilitis, diphtheria, and fibrinous laryngitis are infectious diseases. May not these be compound? Have we not seen chancre and chancroid affecting, synchronously, the same tissue without reciprocal modification? It is reasonable, then, to suppose that, during an attack of one of the foregoing diseases, tubercular bacilli may find lodgment in the abrasion, and, subsequently, at a time when certain tissues more readily undergo retrograde metamorphosis, this infection manifests itself in the lungs, lymphatics of the neck or bowels, or by necrotic caries of some of the bones.

The muscles of this region are encapsulated by strong fascia, which, like that in the other parts of the body, offer a firm resistance to fluids, such as pus, blood, and serum, and directs their

course towards the point of least resistance, which, in this region, would be downwards toward the thoracic cavity, especially so if the origin was deep in the neck. If containing pus, we have the usual symptoms of septic infection, and this is a reasonably good point of differentiation. If the condition existed at birth the matter is simplified by exclusion, and belongs to one of the smallest divisions into which these diseases may be divided. Angioma, hydrocele, haematocele, colli dermatoid, and bronchial cysts, multilocular and unilocular cysts, hygroma, fissures, and sinuses are examples. These are accidents of foetal life, and their etiology is lost in embryological speculation.

The influence of heredity, always an uncertain quantity, exists, no doubt, but endows the tissue simply with a life limitation or susceptibility to early degeneration. Therefore, excluding the above, infection plays an important role in the etiology of diseases of this locality, not simply inflammatory, where we have superficial and deep abscess, but in malignant diseases, as carcinomata and sarcomata. Their specific germs have, as yet, eluded the eye and tests of bacteriologists, but, reasoning from analogy, we suppose them to exist. The fact, then, that serious trouble arises, not alone from active pathological changes at the seat of the disease, but by reason of pressure on adjacent tissue, from discharge of contents into vital regions, such as lungs or pleura, or by entailing trophic changes or total suspension of nerve energy, it is essential that the necessary remedies be applied early. Spondylitis is not a common disease here, but may be the source of deep abscess, and, under the ordinary conditions of suppuration, there will be the usual symptoms of active struma, chills, high temperature, hyperdrosis, and loss of appetite.

Retropharyngeal and periesophageal abscess have a deep origin, and must be recognized early if serious trouble is averted. The commencement of these is marked by the usual constitutional symptoms. The head is carried to the side opposite the diseased point; pain, redness, and tumefaction at the point; dyspnoea, dysphagia, and paralysis at a later stage. The management of these cases varies with the conditions. Danger may be averted by promptly opening them. This can be safely done by Hilton's

method. The lymphatics, then, subserving the purpose of a temporary check on the free absorption of septic matter into the system, would be involved in all diseases of this region of an acute inflammatory nature.

We have, therefore, innumerable modifications of this glandular tissue, the most common is tubercular enlargement or infiltrations. The submaxillary, subaural, lateral, and post-cervical glands are those most commonly affected. They form slowly, are somewhat painful, freely movable under the skin, and loosely attached to underlying tissue. Ultimately they soften in the center, suppurate, open, and discharge for a long time, leaving an ugly cicatrix. The treatment consists in prompt removal, or, if already open, they should be curetted and packed with aseptic gauze. If neglected they become foci, from which flows a stream of toxic matter, that, sooner or later, shows in other parts of the body.

A condition of the lymphatics, not common but of great importance, relates to primary syphilitic infection. This can best be demonstrated by the following cases:

CASE No. 1.—Glady S.; age 22; in apparent good health; has enlargement of submental glands; indurated, conglomerate, and immovable, slightly painful on pressure. On prolabium of lower lip has an indurated tubercle, the surface of which is slightly abraded; has been ineffectually treated for several weeks by her medical attendant. This is a brief history, but the diagnosis can be easily made. It is either syphilitic or carcinoma, the former probably. On inspecting the body the usual pigmentary maculæ were discovered. Mercurial treatment dispelled all doubt. In ten days the sore on the lip had almost disappeared.

CASE No. 2.—Amie C.; age 24; marked enlargement of subaural glands; an inspection of pharynx disclosed chancer on left tonsil, also usual syphilitic dermatitis.

The differentiation in these cases can be made only by careful inspection of the mouth and pharynx. General syphilitic infection in more chronic form may present us with parallel conditions. With this difference in these cases, the glands are separate and movable, and there will be a history of specific infection. Aneurism is another not uncommon disease, and covers a wide field, as it is found in all parts of the body, and arises from traumatism,

atheromatous degeneration of the vessels, and any cause that affects the coats of the arteries.

The differentiation must be made from fibrous, fibro-cystic tumors, hygromas, and hydrocele-collis, which lie in close union with large vessels, as under this condition the bruit of aneurism may be closely imitated. The latter are compressible and symmetrical, have a distinct rhythmical pulsation and characteristic bruit.

HYGROMA.

Mary H.; age 4; robust; presents an enlargement above left clavical, posterior to the lower attachment of the sterno-mastordems about the size of an orange; apparent at birth as a small tumor. It is compressible, elastic, and multilocular.

Operation. Incision parallel with posterior margin of sterno-masloid for about eight centimeters. The cyst burst before it was dissected out of its attachment to the fascia of the scaleni muscles. Child made a good recovery.

It has been advised to remove the contents of these cysts, and fill them with parafine or similar substances to facilitate removal, but I cannot see any advantage in this.

Bronchocele. This is the most common of all diseases of the neck, and amenable in some degree to surgical treatment, although clinical experience fully establishes the fact that total extirpation is followed sooner or later by obstinate cachexia. For convenience, the different forms of this disease are arranged into three classes, viz.: Parenchymatous, where there is hyperplasia of the stroma; the follicular, where the glandular element predominates; and, finally, the vascular, in which there is enlargement of the vessels (primarily veins). The disease appears usually between the ages of ten and thirty years, affecting more often women. Any paramesial enlargement in the region of the cricoid cartilage, or just below, which rises and falls with larynx in deglutition, painless, and of slow growth, is probably bronchocele.

In removal, the capsule is cut down upon and opened, the gland is then shelled out; or to make the operation bloodless, the gland is raised, and a rubber band is thrown around the pedicles while the gland is removed.

In Switzerland and countries where this disease prevails largely removal is very common and successful. In addition to bronchocele, abscess, syphilis, tubercular glands, aneurism, and congenital cystoma, we have angioma, atheroma, lypoma, carcinoma, sarcoma, verruca, and lymphoma, both malignant and hyperplastic.

Diseases of this region may be arranged topographically and chronologically. Appearing in a child at birth it is angioma, hygroma, or bronchial cysts or fissures. Hygroma will be found usually in the supra-clavicular region under the sterno-mastoidens. Angioma has no special locality. Bronchial cysts and fissure will be found where a defective union has taken place between the segmentis of the bronchial arches. *Lypoma*. These are found immediately under the skin in all parts of the neck, and are hyperplastic growths of subcutaneous fatty tissue, movable, not encapsulated, of rather firm consistence, dimpling of the skin on counter pressure, easily removed, with no tendency to recidivation. *Steatoma*. These are not confined to any locality. Contents fluid, or semi-fluid, or cheesy, encapsulated, and tend to recur if the sack is not removed or destroyed. *Sarcoma*. This appears rather early in life, local tumefaction, pain induration, rapid growth, with no glandular complications unless the primary form is lympho-sarcoma. It begins deep in the tissues, early implicates adjacent organs, causing serious functional disorders, recederistic and hyperplastic. *Bursa*. These are not common, but are found near the thyroid cartilage and as hyoid, proceeding usually from traumatism, giving rise to no serious trouble, treatment by aspiration and obliteration of cavity. *Cicatrices*. These follow tubercular ulceration of diseased glands and from extensive burns. In both cases disfigurement may be great enough to demand plastic operations.

In addition to the above we have lodgement of foreign bodies in the larynx and trachea; also such articles as artificial teeth and plates become lodged in the œsophagus. Each case is an emergency, and requires treatment peculiar to itself.

Malignant diseases of the mouth extend into these regions, and require removal of larynx, although it has seemed to me, when malignancy is established, recurrence is always certain, and an

operation is contra-indicated. The operation is attended with large mortality, and the disease reappears within a few months.

In all diseases affecting the trachea and larynx of such nature as to interfere seriously with breathing, or in malignant diseases of pharynx or tongue, in which radical surgical procedures are followed, it may be necessary to perform primary tracheotomy. It has the approval of clinical experience.

To recapitulate briefly:

1. Congenital diseases are anaplastic, hyperplastic, or heteroplastic, easily diagnosed, non-inflammatory, amenable to surgical treatment, with no tendency to recidivism.
2. Inflammatory new formations arise from extrinsic infection, circumscribed and localized by the lymphatic glands. Early extirpation of foci the only effective treatment.
3. Heredity means transmitted cellular life limitation, and this may take place in the blastoderme vesicle.
4. Infection may be simple or complex; simple, when due to a single toxic agent; complex, when two or more noxious substances find simultaneous entrance into the system.
5. In operations on the neck avoid the scalpel; avoid injury to important nerves, such as the recurrent, laryngeal, and pneumogastric; avoid letting air into veins; perform preliminary tracheotomy in extensive dissections about the larynx and pharynx. Consider electricity in discussing bronchocele and other non-inflammatory affections.

THE SIGNIFICANCE OF ABDOMINAL PAIN.

BY C. E. WALTON, M. D., CINCINNATI, O.

Pain is a diagnostic thermometer of such delicate adjustment and variable importance that its correct reading is invaluable. The entire management of a case depends upon it. Between the diaphragm and pelvic brim is run the complete gamut, from green apple colic to salpingeal rupture. Not an organ in that extensive domain but has its tale of woe announced with more or less emphasis.

The stomach, with its burning pain, tells of trouble in its

mucous lining; with its periodic pains it refreshes our physiological knowledge of its neurotic capabilities; while, with its stabbing pains, we are reminded that the cancer portion of the zodiac is in the ascendancy.

The liver, spleen, and kidneys, with their distensive pains, signify the progress of an inflammatory process, and with their throbbing pains herald the advent of an abscess.

The pancreas, with its carcinoma, plays a painful prelude to what becomes later an inevitable dead march.

The rhythmic pains which come and go,
With speedy ebb and speedier flow,

mark the distress signal of some hollow organ.

Intestines large or intestines small,
Or the festive appendix with wormlike crawl,
Or the ducts and bladder intended for gall,
Or the delicate ureter with stony pawl,

are sending a Macedonian cry for help, and speedy help they must have, or the whole economy may be overwhelmed in a helpless ruin.

The serious involvement of any of the abdominal viscera is so threatening to the life of the patient that a correct interpretation of the pain signals is of the utmost importance. Where they have been overlooked or misinterpreted, it is not always an easy matter to harmonize the "will of God" with the stupidity of the practitioner in the minds of the inquisitive bereaved.

Have you ever seen a case treated for colic and found at the autopsy, four days afterward, a gangrenous intestine fastened in the death-grasp of a fibrous band?

Has your knife ever disclosed the peritoneal cavity filled with pus from a ruptured tube, where the outcries of the patient and extremely sensitive abdominal wall had been thought to result from a drink of cold water, and treated for a neurosis? Have you ever seen a renal colic from a pelvic calculus treated for months for an enlarged spleen?

Have you ever seen a truss put upon an inguinal abscess to quiet the pain of an inguinal hernia?

Have you ever seen intestinal obstruction, or a peritonitis, cured by catheterizing the bladder?

Have you ever seen impacted gall-stones treated for pleurisy?

Have you ever seen a concealed, strangulated hernia treated for an inflamed ovary?

Have you ever seen a floating kidney treated for a hypertrophied liver?

If you have seen any or all of these it will require little argument to convince you of the significance of abdominal pain.

Pain, pulse, temperature, upon these three phenomena stands the diagnostic tripod of a large proportion of abdominal conditions.

The most serious conditions are indicated by sudden pain and severe pain, rapid pulse, and either no temperature or a sub-normal temperature. The choice time to operate for abdominal lesions is before the temperature has begun to mark the destructive march of a fatal inflammation.

A ruptured tube, a constricted bowel, either hernial or otherwise; an impacted calculus, biliary or renal; a suffering appendix, all demand accurate and early diagnosis, however various and tardy may be the treatment.

Two conditions, exceedingly painful and frequently serious, yield so readily to simple procedures, that I cannot forbear mentioning them:

1. A large per cent. of renal colics are relieved by the simple introduction of a sound through the prostatic urethra. The pain stops so quickly as to seem miraculous.

2. The intestinal colics due to incipient hernia pass away instantly by pressure over the internal abdominal rings.

These two procedures, though called for so seldom, bring instantaneous relief to the sufferer, and abiding reputation to the practitioner.

Abdominal pain, properly diagnosed and properly treated, brings lasting renown, even though the undertaker follows in our footsteps.

DISCUSSION.

DR. T. F. WILSON—I rise to a point of order, in order to adorn a tale or point a moral. The gentleman himself will remember that some time ago in this self same city, he took the undersigned sharply across his knee because my Latin was not exactly up to date. They didn't do those things down in Cincinnati, and I have felt humiliated ever since. I only want to say in regard to this—in illustration of this—that I detected him as saying that pain is a diagnostic "thermometer." That's good. Very good. That came from Covington just across the suspension bridge. I do not recognize anything in his paper that is particularly heretical.

DR. BEEBE—Dr. Walton should be highly complimented, because I think that is the first time I ever knew Dr. Wilson to give his unqualified approval to any paper read in his hearing.

SUB-PERIOSTEAL RESECTION OF BONE.

BY J. KENT SANDERS, M. A., M. D.

The subject of this brief paper has been chosen, not without full appreciation of its masterful presentation and discussion by the more recent writers on surgery. With all the more delicacy, therefore, will this paper embody a few suggestions to which sufficient prominence, I cannot but think, has not been given, the more certainly to secure the best possible results.

The *preservation of the periosteum* is one of the important points in all resections of bone, whether in continuity, that is, of the shaft or in contiguity, that is a part or the whole of the articular end. Not only does it make it probable that there will be a reformation of bone to a greater or less extent, but the attachments of the muscles, tendons, and ligaments remain so nearly in their normal relationship that the function of the limb or joint is not so greatly modified. In compound, comminuted fractures, particular care should be taken to save the periosteum; small pieces of bone can often be dissected out, leaving a few patches of semi-detached periosteum, which should be sutured with catgut, thus materially assisting in the reformation of that part of the shaft which is lost. In

resection, in continuity for diseased bone, the periosteum is usually easily detached, and often other foci of disease can be reached through one incision in the periosteum by means of a chisel, gouge, or curette, and suitable portions of the shaft can then be removed, with the possibility of considerable reformation of new bone. One of the requisites, however, for repair, in the loss of the shaft, either from accident or disease, is that the periosteum should be kept somewhat in its normal position by distension from within. This can be done by means of decalcified, antiseptic bone chips, as recommended by Senn in his valuable treatise on "Tuberculosis of the Bones and Joints." The success attendant upon tamponing of the cavity left by the resection of the shaft acts somewhat on the same principle. Packing of the periosteum to its normal distension, with long strips of iodoform gauze, certainly acts well in many cases where there is much and persistent oozing. The removal of the tampon, however, and the subsequent suturing which requires an anæsthetic, or where the sutures are put in position and only require tightening, both tend to disturb the process of repair, and gives an added risk for infection of the wound, and breaks up the blood clot which is gradually organizing.

The *second point* that it is desired to make prominent in this paper, is that the process of repair is materially assisted and hastened by the use of a coil or loop of kangaroo tendon introduced into the space caused by the resection. Kangaroo tendon being limited in length, it may be necessary to use two or more tendons where the space required to be filled in is of considerable extent. It is needless to say that the tendons should be thoroughly sterilized, although it does not seem imperative that they be softened in any way before using them. The tendon serves to maintain the periosteum in position, and with the blood clot forming around, answers very well the purpose of the bone chips.

The methods in resection of the articular ends of bones are being modified by modern surgery to such an extent, that the typical or complete resection is now less frequently advised than the atypical or partial. Shortening incident to the removal of the epiphysis in the young, can be materially obviated by saving the portions of the epiphysis which are not diseased, and removing the

foci of disease which are usually near the ends of the bone, through the opening in the epiphysis made by the removal of the diseased portion.

In these resections the periosteum can usually be lifted and pushed aside to give the requisite field for operation, and should then be carefully replaced and sutured. The insertion of the tendons and ligaments in this way can be saved, and seem to do as well as where a portion of the bone is chiseled off and then replaced, as suggested by Senn. Where there is much bone removed, thereby causing a considerable cavity that cannot be obviated by drawing the bones together, the same procedure may be carried out as in the shaft by the use of the coil of kangaroo tendon. The kangaroo tendon answers, in these cases, every purpose of nails, suturing the cut ends of the bones together, and so long a time is required for the tendon to become absorbed that there is a deposit of earthy salts before the temporary support is done away with. The use of a ten per cent. emulsion of iodoform in sterilized olive-oil, or glycerine, has acted better in the cases under observation, where injections were used prior to any operations. Injections carried into the bone; in tubercular affections, seem to limit the tubercular process, lessening the inflammatory zones around the diseased portion, and preparing the parts for speedy recovery after operation.

I should also like to emphasize the uniformly good results in resections that have inevitably gone on to suppuration from the use of a solution of calendula, for cleansing out the wound where irrigation is necessary, it acting better, in many cases, than where a germicide was used, especially where a previous series of iodoform injections had been used.

A NEW STITCH FOR THE RECTUM.

BY THOMAS CHARLES MARTIN, M. D., CLEVELAND, O.

On September 28 I received at the Huron Street Hospital, from Dr. O. O. Hausch, of Perry, O., Mrs. A., presenting a history of

all the miseries usually attendant upon the following physical conditions: Ruptured perinæum with sphincters ani uninjured apparently; sub-involution, retroversion, and prolapsus of the uterus, bi-lateral laceration of the cervix uteri, cervical erosion, and endometritis. I dilated the cervix, curetted the endometrium, dug the scar tissue out of the neck and repaired the tear, restored the perinæal body, and then, as is my habit, introduced a speculum to the rectum and gently separated the blades. The entire circumference of the third portion at once burst in hemorrhage. The membrane was thoroughly macerated by the disease. The sphincters were wholly relaxed. The subject was emaciated and exsanguinated, the processes of waste were more active than those of repair, so her vital forces were not to be relied upon to restore the rectum. We were, therefore, forced to consider its excision; a procedure which I feel constrained to say is enjoying at present among undiscriminating surgeons a rather reprehensible popularity. There were objections, however, to immediate action; to operate at once might possibly compromise the success of the perinæorrhaphy. I felt grave doubt whether the rectal membrane was sound enough to endure the tension of the sutures ordinarily used to coaptate the rectal and anal margins; and I was also of the opinion that the patient had been sufficiently tortured by curettetment, trachelorraphy, perinæorrhaphy, and removal of urethral carunculæ.

Ten days later the patient was again anaesthetised and the stitches removed from wounds which had healed satisfactorily. The rectum was found unchanged. The lower diseased portion was, therefore, excised and the sutures reënforced by trees bone-button, cat-gut stitch, thus removing all tension of retraction from the otherwise ordinarily sutured wound. On the fourth day the stitch was removed. The cat-gut, where buried in the tissue, was found almost completely dissolved, and the bone-button was discovered reduced, by the action of the mucous, to about one-half its former thickness. The stitch gave the support required, and, being of animal tissue, was absolutely unirritating.

This stitch applies to the rectum the mechanical principle employed in the use of the hare-lip pin in operations about the mouth. It is prepared by passing a strand of cat-gut through one eye of a

bone button (such as is used on youth's waists), returning it through the other eye, and balancing the button at the middle portion of the strand. Each separate end of the cat-gut is now to be passed into the eye of an ordinary cervix needle. The perfect success of the stitch depends upon the course of the needle. Each needle should be backed up the bowel as high as the internal sphincter. Here its point should be passed through the membrane. Great care must be exercised that the stitch be kept external—i. e., to the rectum side—of the sphincters. It should now be carried downward and parallel with the bowel to a point beneath the wound (ordinarily sutured), where it should be passed at the greatest possible depth superficial to the muscles outward in the direction of the tuber-ischii, emerging about one inch from the wound. The companion needle should now be similarly passed at a distance from its fellow equal to that between the two eyes of the button, and, on emerging, each thereof bearing needle must be passed through another button and the suture then tied down on it. Within the cylinder of the anus, drawn fast against the wall, may now be seen the first button, its edge only presented to view, while at about an inch to the outer side of the wound is seen the companion button on which the knot is tied securing the stitch. One button on the inside the other on the outside of the bowel, the cat-gut between transfixing the tissues. No movement of the muscles can now molest the wound. As a measure of reinforcement this stitch may be added to any of the several methods of excision of the rectum, and I, therefore, feel but little hesitancy in presenting it for the consideration of rectal surgeons.

DISCUSSION.

DR. WOOD—I wish to comment simply on the mechanical principle which the doctor has here introduced; that principle of overcoming, when it is intelligently applied, the slipping of the mucous membrane. This is to avoid the slipping of the tissues which so often follows in the wake of the so-called American operation. However, the technique which the doctor has followed here is entirely unnecessary in its complication. Some two years ago I pre-

pared a paper for the American Institute of Homeopathy in which I gave the evils attending the so-called American operation, and described a method which, in principle, is exactly like this, only instead of a complicated button I introduced a quilled suture, carrying it from the outside up into the mucous membrane, tying four of those without any button within or without the rectum. This can be done very quickly with the chromicized cat-gut, if it be strong enough for the purpose. That doesn't have to be removed and you can have no complications there such as, it seems to me, you would be likely to have in a case of this kind. I think this principle applied to these several operations will overcome, in a measure, the slipping of the tissues. But the method here advocated seems to me to be entirely too complicated, when there is a much simpler method by which this principle can be applied.

DR. SCHEBLE—In this American operation, or the Whitehead operation, the redundancy of the mucous membrane is pulled down, but the muscular coat of the intestine is not removed. It is that part which we find in persons with a very flaccid lower portion of the bowel, and it easily slides and comes out two or three inches. That is the portion of the rectum to which this operation applies. Now, if anybody has operated on any of these cases and finds that the rectum gets away from them, that would be another matter; that is new to me. It doesn't make any difference how far you go up, if the dissection has been careful the rectum comes down easily, and with the external sutures there is never any difficulty about it, and no objection to the operation. Now, in all such persons having difficulty with the rectum we know that a large per cent. of all such cases are of tubercular origin. I exclude, of course, ordinary hemorrhoidal tumors, and take into consideration fistulas. Now, the thing to avoid is the cicatricial tissue. In Dr. Wood's operation that would seem to be all right, but in this operation you leave a tract of cicatricial tissue from the inside of the rectum down to the integument on the outside. When the operation heals up you then have in the course of that suture cicatricial tissue with its subsequent irritation from a very easily excited abscess and previous fistula. Of course, I don't object to these little frills in any surgical operation, but I fear they are resorted to sometimes when they are not necessary. I never saw the mucous membrane get away from anybody after it was properly removed.

DR. BEEBE—I beg to differ with Dr. Scheble. The part referred to by him is much above the part that is referred to by Dr. Martin; which is a simple removal of the hemorrhoidal tissue, while this is a case of prolapsus.

DR. WALTON—I think Dr. Scheble is very fortunate from a geographical stand-point. It may be that the sort of mucous membrane which is grown within the corporate limits of Toledo is not given to curling up towards the pylorus; but the mucous membranes which grow up around Chicago seem to have a move on them that is characteristic of the people who furnish the so-called rectums. There are a number of people in the vicinity of Chicago who are going around now with about two inches of cicatrical tissue between the anus and where the mucous membrane is to be found. Dr. Scheble is to be congratulated in never having met with these cases, because if he should—I know there are lawyers in the community who are quite capable of instituting malpractice suits. That is one of the great dangers of the American operation, that is, the curling upward of the mucous membrane; and whilst I have never employed this button, I can see that it is a valuable device and has a place in surgery of that part of the body. Heretofore I have relied entirely upon the strength of the sutures which united the mucous membrane with the integument.

DR. WELLS—I wish to offer a word in reference to the American operation. I suppose that is what this button is intended for.

DR. MARTIN (interrupting)—It is designed to be employed after removal of the lower portion of the bowel, whether it be removed by the Whitehead or the Allingham modification of his operation, or by the method that has been devised by Dr. Pratt, of Chicago.

DR. WELLS—In speaking of the American operation, from what little experience I have had from the cure of those cases, I think I can say this, that in doing that operation I believe great care should be taken mainly in the amputation; that is, the last amputation, or where you amputate the skin with the mucous membrane. I think where the dissection is made, for instance, beginning above and dissecting down, carrying the dissections down to the junction of the mucous membrane and skin, if one is not very careful you will carry it on further until you come out on the buttocks on either side. In those cases where it is carried too far, of course, you get more or less tension when the mucous surface is brought down and attached to the free edge of the skin below, and very many times the quality of the sutures will give out early, and you get what Dr. Walton has said, more or less contractions; that is, the mucous membrane will leave the skin and go upward. But I believe that tension is avoided if we are careful in doing that operation. We must remove just enough of the membranes carrying the hemorrhoids, and carry it to the lower edge of the wound—to the junction of the mucous membrane proper and the skin—and make the amputation at that point, so that there is no tension what-

ever. When this is healed and the operation is completed, you will not be able to see the junction unless some little traction is made upon the site of the suturing. The surface will be smooth, and I believe you will have very little trouble. My experience is that there has been very little trouble in controlling the discharges. If the mucous membrane does not unite with the skin, but is carried downward, it is constantly being irritated by walking, and there is a more or less patulous condition of the bowels with frequently a worse condition than before the operation; that is, there will be inability to control the gases and feces, and the patient will become a chronic invalid, and I am not sure but what they have a right to complain when they are in that condition. I believe, however, that the success of the whole operation depends upon the proper care and attention being given at the site of the amputation—at the junction of the skin and mucous membrane. I think where that is done there is very little tension upon the mucous surface, and the union is very satisfactory.

DR. BIGGAR—I have listened with a good deal of pleasure to the paper as presented and the extempore remarks, and can see no reason why these buttons should not add strength to the operation. It is true that there is danger of sliding tissues and difficulty in uniting it. But I think Dr. Martin has suggested a means which may be applied. It is a conservative method, and one which I think will be added to the operations in and about the rectum. It is entirely new to me. There is one point in regard to this operation upon the rectum. Some persons said two or three years ago—and I think it is now being fully illustrated—that there will be less removals of the lower part of the rectum than there had been previous to that time. After some experience in regard to the operation upon the rectum, I find that in non-malignant disease of the rectum, where there is a fissured condition, or where there may be a prolapsed condition, or where there may be pockets or papillæ, that the removal of this pile-bearing inch by the splitting operation, or by a complete excision does not cure the patient. I am referring now to the scar tissue which forms and produces this thing referred to—the incontinence of gas and feces—which is a worse condition than existed before the operation. I think I have tried to follow the methods as laid down by the different authors in regard to this, yet I am convinced that we do not reach the seat of the disease by the use of the knife. And I am fully convinced that the best treatment for these cases will be largely in regard to the remedy indicated, taking into consideration the pathology—the cause of these troubles—which meanwhile result from inactivity of the portal circulation. The removal of this lower part of

the bowel alone does not reach the cause of disease; for that you must go to the very origin, and that is the sluggishness and inactivity of the portal circulation, which dams up and causes a distension of the hemorrhoidal veins, which occasions this trouble and causes so much surgery. And I will predict this, that if any person will take the pains to look carefully into the pathology and think of two or three remedies, they will find that two remedies which I have used with great and good effect after the operation will serve them nobly, namely, Collinsonia and Sepia. They will relieve this hemorrhoidal congestion and greatly retard the reformation of the disease.

DR. MARTIN—A word about Dr. Wood's stitch, as he employed it, passing it through from the skin up to the bowel, turning and returning it, passing through the mucous membrane and pursuing a similar course to the point of entrance, I should think it would fail of its purpose. There would be danger of that stitch cutting through the mucous membrane at the place where it crosses from the point of emergence through the tissues, into the bowel to where it enters the tissues on its way back to the starting point. The button distributes the pressure and prevents the stitch cutting through. Dr. Wood's stitch would defeat its purpose also, I should think, by exciting contraction of the sphincter ani through which it passes.

DR. FAHNESTOCK—In speaking of the American operation, the one great thing to be guarded against is the slipping upward of the tissue. In a great many cases, no doubt, too much of the tissue has been removed in operations by the American method. It is best to remove just as small a portion of the mucous membrane as is necessary to avoid going quite into the skin, cutting through the mucous membrane, liberating the bowel up beyond where the gut has been removed, liberating that with the scissors, and after removing the bowel stop every particle of hemorrhage. That is the one thing to be looked after, if you wish to expect success and immediate union; then bring down the bowel, all hemorrhage having been stopped, take an interrupted suture, never using a continuous suture, then on the other side put a double suture and also in the posterior portion of the bowel. After which I use either iodoform or boracic acid on absorbent cotton or wool, placing a small pledget of it up in the bowel beyond the sphincter muscles. Then put on a dressing and a pad tightly over the rectum and notice this within two hours after the operation, and looking after that every two or three hours, endeavoring to keep it absolutely dry, and remove it in twelve or twenty-four hours—this pledget of wool—and, if necessary, put in another. In using these buttons they may be all

right, not knowing or having any experience with them, but I would judge that they would set up an irritation in the bowel, causing a contraction of the sphincter muscles and producing that drawing every time there was a contraction of the sphincter muscles. But, as Dr. Biggar has wisely said, I always study my case and give the indicated remedy and keep it going right along after the operation. Following these directions I have been happily surprised in a great many cases and cured where nothing else has been of avail.

DR. BANNING—I believe that in a very few years there will not be one operation on the rectum in a hundred, and I am confident that Dr. Biggar is correct in regard to this description of rectal diseases where the pockets and papillæ are in prolapsus. It is a defect of the circulation; to my mind, the pathological condition is clear. It is a settling of the small bowels upon the edge of the larger one or upon the centre of the rectum. Constipation usually ensues. After that the hardened dry feces may push the mucous membrane before it, then we have the strictured condition of the hemorrhoidal veins at that point of compression, because the blood cannot get through.

APPENDICITIS.

BY JOHN DIETRICK, M. D., YOUNGSTOWN, O.

You may not approve of the subject I have chosen for a few remarks. You may well say that "old fad" again. Is appendicitis endemic or epidemic in some localities? Absurd question. But I have witnessed an epidemic of it in our vicinity in the minds of some physicians. All cases of cramps are appendicitis, and an immediate operation advised and strongly urged as the only remedy. A few surgeons have hobbies; some of these is the hobby of appendicitis—a morbid condition of the mind, a mania. Think of one man having five operations for appendicitis in thirty-seven hours. Two survived, three died, and one only had appendicitis. Truly a fearful plunging, controlled by a morbid mania. They screen themselves behind such able men as Dr. J. B. Murphy, of Chicago, who, when discussing this subject before the American Association of Obstetricians and Gynecologists in September, in Toronto, made use of the following language:

"When a patient has unmistakable symptoms of appendicitis, not to-morrow, not to-day, but *now* is the accepted time to operate."

To this beacon-light they swear their surgical allegiance, and as a hobby it is burned deep into the gray matter of their brain as a surgical mania. This indiscriminate surgical diagnosis is not *differential* diagnosis, and patients are like lambs innocently led to slaughter.

ETIOLOGY.

Appendicitis may be classed as catarrhal ulcerative inflammation of the mucous membrane of the appendix, possibly due to the action of micro-organisms. The mechanical action of foreign bodies of different kinds, as grape-seeds, cherry-stones, orange-seeds, worms, shot, beads, bone, hair, thread, etc. Traumatism rarely.

PATHOLOGY.

Appendicitis may extend along the bowel under the misnomer of perityphlitis or paratyphlitis. The gravest form is when the whole appendix becomes gangrenous, or the perforation communicates with the free peritoneal cavity, causing a diffuse septic peritonitis and enteritis, which most frequently results in death within a very few days.

When perforation is limited by the formation of an abscess wall, composed of loops of the small intestine and omentum, which becomes firmly adherent by plastic exudation, resulting in limited suppurative peritonitis.

A diffuse cellulitis or phlegmonous inflammation of the connective tissue behind the cæcum, without participation of the general peritoneal cavity, will occur before perforation takes place, the perforation not opening into the peritoneal cavity, but into the loose retroperitoneal tissue, leading to a localized extroperitoneal abscess. It may discharge into the cæcum, or an adjoining adherent loop of intestine, the vagina, fallopian tubes, or into the uterus, or the rectum, or it may follow the layer of muscles similar to psoas abscess, or it may point to the surface.

The most favorable is when perforation does not occur, or is small and surrounded with a mass of plastic exudation, but is more prone to recurrent attacks.

DIAGNOSIS.

One of the most important requirements is a complete history of the case. The most characteristic symptoms of appendicitis are localized pain, tenderness and rigidity of the abdominal wall on the right side in the ileo-coecal region. The point of greatest tenderness, as ascertained by pressure with the end of one finger, is nearly midway from the anterior superior spine to the umbilicus. As long as the disease is limited to the appendix the swelling is not distinct, and if the appendix is located behind the cæcum it often eludes detection; the swelling most frequently forms rapidly, and varies in size depending on the tissue involved. Fluctuation is generally absent or indistinct, on account of the rigidity of the abdominal wall covering the inflamed area. Later, in the encysted variety, it becomes more prominent and is easily detected. If during the course of an attack of appendicitis the patient experiences a severe, sudden, diffuse pain, and presents evidence of shock, with frequent, small, and wiry pulse, hurried respiration, probably sub-normal or high temperature, it is almost certain that an ulcer or an abscess of the appendix has ruptured into the peritoneal cavity. Chills, followed by high fever, is not always present.

I have seen the most severe cases with excessive peritonitis and offensive pus with normal temperature; others with encysted pus point and open through the skin with normal temperature. Vomiting accompanies many cases, the only differential diagnostic point is that it is not as persistent as in obstruction of the bowel. Constipation most frequently accompanies an attack of appendicitis. Rectal, vaginal, and bimanual examination, and palpation and percussion are essential in the diagnosis of appendicitis.

TREATMENT.

Treatment may be divided into medical and surgical.

Medicinal treatment, here is the triumph of homeopathy. Select your remedies from a physiologico-pathological basis, their therapeutic range and drug pathogenesis, guided in your selection by their symptomatology. In many cases it is necessary to resort to anodynes to relieve the severe pain that aggravates the condition.

Do not neglect the use of such remedies as may be classed as aseptic or antiseptic from a homeopathic standpoint. Control as much as possible the inflammatory condition; use remedies to about the suppurative tendency. I do not know of any one single remedy from experience that equals mercurius dulcis in frequent small doses.

Wash out the bowel thoroughly, place the patient in the latero-abdominal position, use glycerine and refined oil, followed with water at one hundred degrees, containing sulphate of magnesia. Place patient in position known as genu-pectoral, which will greatly facilitate the injection of the large quantity of water required. Some physicians advocate frequent small doses of a saline cathartic. I do not use it until after the large bowel is thoroughly emptied and washed out, and seldom then. Local application of hot packs containing turpentine are beneficial, and should be thoroughly applied over the appendix. During convalescence use only liquid food.

Surgical treatment. The pathological condition should govern the treatment. Aseptic cleanliness is always required. When you have an encysted abscess: First. You may aspirate the pus, wash out the cavity, and use slight compass; Second. Puncture with the bistoury, incise freely, and insert drainage tube; Third. A free exploratory incision, irrigate freely, remove all debris, pack with gauze; Fourth. Same as number three, with removal of appendix by amputation, if strongly adherent by long incision close appendix with Lembert suture of silkworm-gut, knots cut short; Fifth. Amputate appendix, stretch gently by introducing through its caliber a pair of closed, slender, long, haemostatic forceps, passing them into the cæcum and gently opening the blades; thereby any swelling of the mucous membrane, or plastic deposit, will be stretched, and the next step easy in consequence. Seize the free end of the appendix with a suitable small mouse-tooth forcep, turning it outside in as a finger glove might be, and the appendix stump is promptly invaginated within the cæcum; withdraw the forceps, and close with Lembert suture or pursestring suture. I prefer the Lembert suture, single or double as required. When there is extensive gangrene, requiring removal, close opening with Lembert

suture, and pocket in fold of the peritoneum and muscles, or suitable pressure forceps. Remove in a few days.

Our enthusiastic appendicitic cranks may thus atone their slashing error by inverting the healthy appendix as described, without amputation or incision, thereby averting any attack of the malady. They may create an additional fad or hobby, and do an extensive trade, by advocating the retro-inversion of the appendix within the cæcum. Would not this be a great surgical achievement as a great prophylactic against appendicitis for all persons, especially children in their infancy.

I trust you will pardon this irony and digression.

DISCUSSION.

DR. SCHEBLE—This is a disease that is not new. There has not thus far been any one point found at which the operation might be safely done. I have arrived at this conclusion, that in the ordinary cases, where the walls of the abdomen are not thick, that point can be very safely determined. I have a case in which there has been occasional recurring of intestinal occlusion. Formerly I gave morphine. Latterly I found that these micro-organism are generated, and can be destroyed by proper treatment. The time will come when this recurrent inflammation of the lumen will produce entire stenosis of the appendix. When that time approaches, of course, there is no delay then, for this acrid fermented fluid in the appendix will set up an inflammatory process there. Then you have a case in which an operation has the most fatal result. But just before that time there is a point when something may yet be done.

DR. WILCOX—When a doctor has come to the point that he will take his own medicine it is evidence of his belief in its efficacy. I am sure if I had an attack of appendicitis myself I would want an operation very quickly. I think there are acute inflammatory conditions where conservative surgery is most dangerous. I have operated in almost every case of appendicitis that I have seen in the last two years, and in doing so I have undoubtedly done it in some cases where the patient might have recovered without an operation; but in none of those cases was the patient worse for having had the operation done. Where they have died it was when they had waited too long, hoping that they might recover without an

operation. So that I believe in every instance where we are thoroughly satisfied of the correctness of our diagnosis, that operation is indicated, and in operating you are not running any such risk as you do by not operation upon an operable case. Operation is not so dangerous as the waiting process. As soon as you are satisfied that your patient has appendicitis, operate.

DR. THOMPSON—I am not a surgeon but I am some little interested in this discussion, and I would like to ask those who know more about this than I do, if there comes a time in appendicitis when an operation is not justified? In other words I have assisted lately in two post-mortem examinations in subjects of this class: one was not operated on and died, the other was operated on and died, and I couldn't get over the impression at the second post-mortem that the operation was humanely unwarranted and the patient was subject to torture and possible shortening of life by a few hours. I want to know if I am right. If there comes a time in these cases when surgical interference would be justifiable?

DR. RUSSEL.—The author of the paper describes an operation of appendicitis by a surgeon of his own town. Recently on a visit to a city I was called in to examine the case of a young boy about twelve years of age upon whom a surgeon insisted that he should be operated upon for appendicitis. With the most careful examination I could make I could find no indication for a diseased appendix. I advised the family to put the boy on the proper line of treatment, to correct the faults of the intestinal tract, and also a proper line of diet. The young lad made a speedy recovery, and has not since, so far as I have discovered, complained of any lesions of the appendix. Recently in Chicago I was witness to two operations upon the appendix, one upon which the operator asked a prominent surgeon if he had not made a diagnosis of the catarrhal appendicitis in this case? The surgeon replied yes. The operation was performed, the appendix was found subnormal in size, was discolored, and removed and opened, and by excessive pressure a quantity of pus about the size of a pin's head was discovered, which verified the diagnosis of the surgeon. Another operation was performed the same day by a prominent surgeon in Chicago in which he had diagnosed appendicitis, and opening the abdomen and searching for the appendix he found one that was one inch and a quarter in length, and about three eighths of an inch in diameter; subnormal in size, no disease; no pathological condition. So that I would say that sometimes surgeons rush blindly into an operation which may cost their patients their lives. On the other hand there are cases brought to the surgeon in which there is a necessity for operation. For instance, we had a case in which the President of

this society was present in which the patient had suffered for two or three days, and had been treated by a regular physician and counsel in which they diagnosed typhoid fever. The patient had a high temperature, was delirious, the abdomen greatly distended, and on pressure over the region of the appendix there was oedema of the tissue, showing evidently pus. An incision was made down into this pus-pocket, and about a pint of pus escaped, and the appendix, nicely amputated, lay in the cavity of the pus-pocket. It was drained out nicely and the patient made a speedy recovery. Another case was brought to me in which the patient had been treated for several months for malarial fever on account of the excessive chills and high temperature. This physician was discharged and one more "irregular" called. He diagnosed it to be typhoid fever. The patient had a speckled rash all over the body, night sweats, great emaciation of the body. On making a rectal examination it was discovered that there was pus to the extent of two or three ounces in the rectum, and on inquiry of the nurse that had been the condition of things for several weeks. After dilating thoroughly the rectum, we found a fistulous tract an inch and a half up the rectum, and on the right side about the size of a small lead pencil. Through this fistulous tract pus had descended into the rectum or absorbed on the same principle that you would give an enema of beef tea or food which is creating a pus poisoning from which this patient could never have recovered except by a surgical operation. The incision was made laterally on the side on which this fistulous tract was made, and the fistulous tract brought down outside, and through this fistulous tract a medium sized drainage tube was threaded, but, prior to that, a small uterine sound was carried up the tube and carried up to the origin of the appendix. The wound was curetted in the rectum and closed, and the drainage of this discharge from the appendix was allowed to escape outside of the rectum, and there was no further absorption. There was no amputation of the appendix and no operation on the appendix. As it drained out gradually, the night sweats disappeared, the chills all stopped in a few days, and he was able to be around the house, and he gained to the amount of twenty odd pounds in six months, and has now a healthy motion of the bowels, and all without a surgical operation. Now, these cases in my judgement are all of them a law unto themselves. I have had several cases where I thought it was positively necessary to perform a surgical operation; in fact, I have operated quite a number of times, but never except in those cases where there was pus and unmistakable appendicitis demanding an operation. So that I believe there is a medium ground which is safe for us all to follow. I don't believe in that rigid

ground that has been taken by Prof. Murphy, in which he says where there is pain in the right iliac region you have appendicitis, and the time to operate is at the present time. I think that medicine judiciously administered, and food properly prescribed for such a patient by the average practitioner, with a line of enemas and saline cathartics that has been advised by authorities, is a safer ground for us all to pursue. The fad of appendicitic operations will be a thing greatly reduced in the future.

FRACTURE AT THE BASE OF THE SKULL.

A CASE, WITH DRAWING.

BY L. K. MAXWELL, M. D., TOLEDO, O.

About 7 p. m., March 16, 1895, W. J.; age fifty-three years; in stepping from a street-car while in rapid motion, was thrown violently to the asphalt pavement, and immediately picked up and carried into my office in an unconscious condition. I made a careful examination for injuries within five minutes after the accident occurred and found the following: A severe contusion over the right, external, angular process of frontal bone, a swollen condition of the left eye, with no evidence of external injury in that region, but every evidence of hemorrhage within the orbit, and free hemorrhage from the nose, but no external evidence of any injury to that organ.

About twenty minutes after he came into the office he regained consciousness, and soon vomited a large quantity of blood. I asked him where he had the most pain, and he placed his hand over the left eye and told me the pain was terrible in that region. About fifty minutes after I first saw him I put him in an ambulance, and went with him to his home. On the way he again vomited a large quantity of blood.

When he reached home he was still partially conscious and passed several ounces of urine. From this time on he rapidly lost consciousness, and by midnight was entirely unconscious. While moving him home the right eye began to show the same evidence of hemorrhage within the orbit.

I diagnosed a fracture through the orbital plates, gave aconite and arnica internally, and applied a compress of Pond's extract over the eye.

March 17, a. m. I found the left side partially paralyzed, he had passed no urine, was still unconscious, and his temperature was 101, pulse 100. In the evening of the 17th I called Dr. Watts in consultation, and he agreed with my diagnosis, and advised that we open the cranial cavity at the seat of contusion. As there seemed to be slight improvement over the morning condition I thought it best to delay surgical action.

March 18, a. m. Pulse 100, temperature 100; better use of the left side, could swallow better, and tried to talk. Afternoon, pulse and temperature the same. Would try to talk and seemed to understand what you said, and when I asked him if he wanted a drink, he nodded yes, and said "yes," but not distinctly.

March 19, a. m. About the same as the night before. 10 p. m. Temperature 101, pulse 115; could swallow very well, but did not seem to notice when you spoke to him, nor try to say anything as he did in the morning. The family told me that he seemed about the same until nearly 8 a. m. of March 20, when he began to sink rapidly, and expired at 9 a. m.

Necropsy, 5 p. m., with Drs. Watts, Mantz, and Dennison to assist.

Removed skull-cap, and found a large blood clot containing four or five ounces under right frontal eminence, and reaching nearly to the coronal suture. There was no depression of the bone at seat of injury, but we found a fracture extending through the roof of the right orbit from the external, angular process nearly to the posterior third of the cribriform plate, thence forward nearly parallel with the right side of the cribriform plate to a point a little in front of the cribriform, thence diagonally across the roof of left orbit and up the left wall to the coronal suture. There was a V-shaped fracture, the base being formed by line of first fracture, which extended through the roof of left orbit to a point near the union of the orbital plate of the frontal bone within the lesser wing of the sphenoid. This fragment of bone was entirely detached at its edges and freely movable.

DEFORMITIES AND THEIR TREATMENT.

BY C. E. SAWYER, M. D., MARION, O.

"As the twig is bent, so is the tree inclined." A proverb most applicable to the subject, "Deformities and their Treatment."

The field of orthopedic surgery is full of possibilities, and presents many subjects worthy such consideration as this society affords, yet, in my eleven years membership, I have heard read and discussed but few papers on this important subject.

Believing that this society is interested in the welfare of crippled and deformed humanity, and that it will give encouragement to personal thought and experience, though it be at variance to generally accepted doctrines, I assume the responsibility of taking issue with present theories of etiology and some of the forms generally adopted by the medical profession in the treatment of deformity and joint diseases.

Success in the practice of medicine resolves itself into one cardinal principle, viz., the discovery and removal of the cause. The general practitioner, as a rule, is inclined to follow some other theory or opinion than his own in the treatment of diseases, without stopping to reason out the effect of the application of the remedy to the disorder. This is especially true of orthopedic cases. As evidence of my position in this connection, I would call your attention to the plaster paris cast that is so generally used, and which has been so unanimously accepted by the medical profession.

In my recent experience in the treatment of cripples and deformities, I saw many cases hurt, and some irreparably injured by their use; especially was this true in diseases of the spinal column, where there is an ulcerative condition. To lock a weazened-face, weak, anaemic individual suffering with a disorganized and degenerating spinal column in a plaster paris jacket is, to my mind, the most unreasonable, and the most unscientific form of treatment imaginable. In the first place it does not nor cannot support the disorganized and distorted spine, because it has nothing to rest upon. It is impossible to fix for it an unchanging foundation without doing irreparable injury to the thoracic or abdominal vis-

ceria, for unless it is tight enough and so moulded as to rest on the crest of the Ilii, it does nothing more than squeeze together the chest and abdominal walls, thus interfering with and obstructing the workings of all the important organs that keep up the processes of life and repair. By this undue constriction lung space is limited, breathing capacity contracted, heart's action obstructed, and perfect alimentation prevented. Add to this the re-absorption of the poisoning exhalations from a body that cannot be kept clean, because of its plastered encasement, and it would seem to me, if for no other reason, it would be self-condemning.

The object of an apparatus applied to a crooked back is to extend and hold in line a tottering column whose stays have failed to give support, and as a result of this mal-position and loss of equilibrium, one or the other side of the articulations of the vertebra are so impinged upon as to stop the circulation by undue pressure, the result of which is to produce ulceration and death of the part thus imposed upon.

Here comes the application of the principle that I have set forth earlier in my paper, viz., the importance of the removal of the cause. One moment's consideration of the spinal column, from an anatomical standpoint, clearly demonstrates that it is one of the most complicated, and yet most scientifically arranged and supported pyramids of which we have knowledge. Upon its being kept erect depends its utility and its health. This condition is only attainable by perfect action of the muscles and ligaments that afford it support. If by any means these supports on either side become weakened, which may be from bad positions of the body, incorrect modes of dress, or undue exposure, the contraction upon the opposite side is such as to produce at once an undue pressure on the interlying cartilage. This being non-vascular, and depending entirely for its support upon absorption from recurrent vessels in the end or on the side of the adjacent bones, we can readily understand how a little pressure would very materially interfere with the supply of nutrition to the parts from which it draws its nourishment to such an extent as to cause its disintegration, and the dead cells thus engendered are sure, being a foreign substance, to set up an ulcerative process, which is only limited in its ravages by time

and the endurance of the patient, unless the pressure is removed by some external support.

This condition may arise and go through the same process of destruction, whether the individual is predisposed to consumption or blood disorders or not, consequently the theory, as advanced by some Orthopedists, that all joint diseases are tubercular or scrofulous, is to me as untenable as the application of the plaster cast is unreasonable.

Close observation to this line of cases shows that the nervous, the lymphatic, the sanguine, and the bilious temperaments are alike subject to their inroads. Undue pressure, regardless of class, predisposition, diathesis, or family history brings about the same result, viz., death and ulceration, with their accompanying drain and systemic contamination.

We have found the cause, now to its removal. The object sought and the result necessary is to remove the pressure. To do this it is necessary, depending upon the location of the trouble, to have some appliance that will carry the weight of all the column and its attachments above the affected parts and to hold it firmly in its natural position. To acquire this object it is necessary to have a solid foundation, and that foundation must be from the ground up.

A house built without something secure to rest upon is sure to fall. A diseased and distorted spinal column, locked up in a plaster jacket, without foundation to rest upon, is sure to allow diseased conditions to progress, as it has nothing to rest upon, it supports nothing, consequently it has not fulfilled any requirements in the case; besides that, it has interfered with every one of nature's processes of repair; it has blocked every avenue of nutrition, and it injures instead of cures. Its use is unsanitary, is unhygienic, is unscientific, and unreliable. It masks every condition to which it is applied. Its only possible recommendation to me is the cheapness and ease of application. It may, for the time being, lead the patient to believe that something is being done, but the time will come when that something will be found to be injury rather than help, and the re-action is sure to hurt he who applies it.

Joints of the human body are made on mechanical principles,

and are subject to mechanical laws, and diseased joints are best treated by mechanical appliances, and these appliances should be so constructed as to give support, to aid nutrition, and to leave the part that is under treatment accessible to observation. These requirements are all obtainable by the use of a properly fitting brace of steel.

If the doctor would only follow philosophical principles in the treatment of cripples and deformities, and use his own judgment in the requirements of a given case, rather than follow the theory of another, much of the mis-shapen humanity of this world would be obviated, and much more credit would be due the medical profession.

To summarize, I would say that deformities are curable in proportion to other diseases, providing always that we individualize our cases and that our lines of treatment are kept within mechanical principles, using only such means as appeal to common sense, regardless of theorists.

Homeopaths, as a rule, are free from the emptiness of empiricism. They believe in a scientific law upon which to base their prescriptions. If the same good judgment directs us in the treatment of deformities we may soon take another step in advance by discarding and decrying the plaster paris cast in all ulcerative joint diseases, especially Pott's diseases of the spine, as abominable and injurious.

REPORT OF THE BUREAU OF SANITARY SCIENCE.

W. T. MILLER, M. D., <i>Chairman</i> ,	Cleveland
" The Diphtheria Epidemic at Ashtabula."	
L. D. MEADER, M. D.	Cincinnati
" The Klebs-Loeffler Bacillus." With Photographs.	
JOSIAH HURTYELL, C. E., Member of the State Board of Health,	Canton
" Chemical Precipitation."	
W. B. GERRISH, C. E.,	Oberlin
" Intermittant Filtration."	

THE KLEBS-LOEFFLER BACILLUS.

BY L. D. MEADER M. D., CINCINNATI, O.

In 1883 Klebs first discovered the bacillus of diphtheria in stained sections of the false membrane, and Loeffler one year later succeeded in making pure cultures of it and proved, by inoculating rabbits, guinea pigs, chickens, and pigeons that it produced the true diphtheritic membrane. Oertel in 1868 and Cohn in 1872 and 1873 claimed to have discovered the germ of diphtheria in the micrococcus, which often accompanies it. This theory was accepted as true till Billroth, in 1874, threw doubt upon it, claiming the micrococcus to be merely a septic organism, and in this he was supported in 1882 by Woods and Formaud. This led to further investigation, with the result above mentioned. Since 1884 Loeffler, Von Hoffman, Roux and Yersin, Welch and Abbott and Escherich have made most thorough investigations of the subject, with the result that now no Bacteriologist hesitates to confirm the identity of the K.-L. bacillus with the germ that causes diphtheria.

The bacillus is found in the false membranes of diphtheria and diphtheritic croup during the course of the disease, and pure cultures have been made from the throat six weeks after the disappearance of the membranes. In no case has the bacillus ever been found in the blood of the heart or spleen after death, thus showing that it is by the toxin it produces, and not by the multiplication of the bacilli in the body, that its deleterious effects are produced. It has also been found in the dust of diphtheritic wards of Hospitals, and in the clothes of the attendants.

The bacillus presents the appearance of rods, straight or slightly curved, which are nearly as long as those of the tubercle bacilli. They are from 2.5 mikron to 3 mikron in length, and 0.7 mikron broad, looking very much like the kind of sponge cake, known as lady-fingers, the extremities being rounded and slightly thicker than in the middle. When stained, there is a clear space left in the center, the extremities being deeply colored. When grown in bouillon made from veal, which is the best known liquid culture media for this bacillus, the culture grows in the form of small clots

upon the sides and at the bottom of the tube. In slides made from this culture, the bacillus is often found in groups of two or four, the rods of which are parallel, crossing each other at a more or less acute angle. In cultures kept at room temperature, the bouillon at first becomes turbid, but soon clears and remains so. When placed in an incubator at 37° C., a part of the culture floats after a few hours, forming a scum upon the surface of the liquid. In about fifteen days the bouillon becomes acid, and then afterwards regains its alkalinity. During this period of acidity, the bacillus is very slightly virulent. Gelatine makes a very poor media for cultivating the K.-L. bacillus, as it does not seem to thrive well upon it. Along the line of the needle in a gelatine tube culture, small white colonies appear which develop but slightly and do not liquefy the culture media. Upon serum prepared after the method of Loeffler, that is, serum to which 33 1/3 per cent. of nutrient bouillon, containing 1 per cent. each of peptone and grape and sugar and 5 per cent. of table salt has been added, the development is very characteristic. After a sojourn of eighteen hours in the incubator, a small round speck, about as large as the head of a pin appears at the point of inoculation. These spots grow rapidly, projecting from the surface of the serum, and taking on a pale, dirty yellow color. They are thicker at the center than at the edges, which at first are round, but soon become ragged in outline. The colonies attain a diameter of from 3 to 5 mm. after remaining a few days in the incubator at 37° C. Stained slides, made from serum cultures, show that upon this media the bacillus has a tendency to form chains of two or three, presenting an appearance very similar to that of the tubercle bacillus. Upon glycerine-agar the growth presents no material difference from that on serum, though, upon the ordinary Agar other germs, non specific in character, are apt to develop covering the colonies of the K.-L. bacillus. Upon plate cultures of both serum and glycerine-agar the bacillus forms a grayish line in the streak, but, if separate colonies form, these in no wise differ from those described in the tube cultures. The K.-L. bacillus is a facultative anærobic forming abundant colonies even when kept in a vacuum. While it can be grown at 24° C., or 75° F., it thrives best at 37° C., or 98° F. Below 10° C., or above 60° C., the bacillus cannot sur-

vive. The staining is best accomplished with the solution of Loeffler or of Roux, though any of the ordinary stains can be employed.

LOEFFLER'S SOLUTION.

Concentrated alcoholic solution, methyl blue,	30 parts.
Aqueous solution of potash (1-1000),	100 "

ROUX.

1 per cent. aqueous solution, methyl green,	3 "
1 per cent. aqueous solution, dahlia violet,	1 "
Aqua dest, Q. S.	

To obtain a bluish color, not too dark.

Gram's method is also very successful with this bacillus. A toxin is secreted by the cultures which, even after filtering is sufficiently virulent, when injected subcutaneously in a guinea pig to produce death in a space of time varying from 24 hours to seven days, according to the age of the culture.

Of all animals susceptible to this bacillus, the guinea pig is the most so, and therefore the best suited for investigations concerning its nature. When injected subcutaneously over the abdomen with a one half c.c.m. of pure culture in bouillon, death ensues in less than 36 hours and the autopsy presents the following lesions: A gelatinous oedema at the point of inoculation, false membrane more or less extended in the track of the needle, very marked congestion of the supra-renal capsules, and a serous or sero-sanguinous effusion in the pleural cavities. The bacillus can only be found in the neighborhood of the point of inoculation, and then in very small quantities. The dog also succumbs to the subcutaneous injection of the K.-L. bacillus, though not as quickly as the guinea pig. By means of tracheotomy the false membranes have been reduced in the throats of pigeons, guinea pigs and cats, rats and mice, proving refractory.

The pseudo-diphtheritic bacillus which has been found in the mouths of healthy beings, is identical with the K.-L. in all but a few points, the most important of which is, that it will not produce death in the guinea pig. This is the crucial test of the identity of the K.-L. bacillus, and when the bacilli are found to be but a few in number it should always be applied.

The bacillus *pseudo diphtheriticus* is the one found in the anginis of scarlatina and rubeola. On serum the rods are perhaps a little shorter than the true bacillus. Also, according to Escherich, when a culture is made in bouillon to which a little of the litmus blue is added the culture remains for a time violet, then becomes blue. If this be so with the change from alkalinity to acidity of the K.-L. bacillus, the bouillon would then turn red, regaining its original color as the alkalinity was again established. The false membrane of follicular tonsilitis are produced by micrococci, some of which, after a short time in the incubator, form colonies in every way resembling those of the K.-L. bacillus except that after the lapse of a day or so they take on a yellowish tint quite characteristic. There is also found in these cases a micrococcus, which forms a small cavity in the serum, and a large coccus which liquefies the serum. According to Martin the association of the *Staphylococcus Pyogenes Aureus* with the K.-L. bacillus, in the membrane implies a prognosis generally serious. On the contrary, when the K.-L. bacillus is found mixed with a coccus which is often disposed in the form of a diplococcus forming colonies identical with it, the case appears to progress rapidly and terminates favorably.

To make cultures of the bacilli the platinum rod should be lightly rubbed over the false membrane and then directly on the culture media, or a piece of the false membrane should be immersed in bouillon and the cultures made from this. To get an absolutely pure culture from the colonies on serum, a tube of bouillon should be inoculated from the most characteristic colony and a fresh culture made.

The technique of making a slide directly from the case is very simple. The platinum needle with the end bent into a loop, is passed over the false membrane and then rubbed on the cover glass till the substance is well distributed. The cover glass after being allowed to dry in the air, is seized with the cover glass forceps and passed through the flame of a bunsen burner or spirit lamp three times, in order to fix it. Then enough of the coloring solution is poured upon it to thoroughly cover the glass, and allowed to rest there from one to two minutes according to the thickness of the film on the glass. This being done, the cover glass is gently washed

in water to remove the surplus stain, its back wiped off, inverted butter side down on the slide, and examined with a $\frac{1}{16}$ " and $\frac{1}{2}$ " objective. If the slide be worthy of preservation, it can afterward be dried and mounted in balsam.

The life of the bacillus is very long, tube cultures on serum retaining their virulence six months after inoculation; therefore, great care should be taken in all cases of true diphtheria to thoroughly sterilize every article which has come in contact with the mouth of the patient. As the discharge of the nasal catarrh which often follows cases of diphtheria contains generally a large number of the K.-L. bacillus, precaution against further infection should here also be taken. The sooner the physician awakes to the fact that each infectious disease has its own especial germ to be diagnosed bacteriologically, and takes the proper antiseptic precautions, the sooner will these devastating epidemics be a thing of the past. As it will not be possible for every physician to be prepared to make cultures himself of the various germs with which he may come in contact, it is the duty of the boards of health of the cities and towns to establish laboratories where these tests can be made, and to so distribute the culture media that every physician may avail himself of the privilege.

LOEFFLER'S BLOOD SERUM.

To meat broth add one per cent. peptone, one per cent. grape sugar, and five per cent. table salt. Neutralize with natrum carbonate. Cook on water bath till albuminous bodies are precipitated, then filter. Sterilize in the steam apparatus and mix with fluid blood serum in proportion one to three. Again sterilize by interrupted exposures at a temperature of 58° to 60° C. Put in tubes and dessicate at 68° C.

DISCUSSION.

DR. WUNDERLICH—I have thought this matter over a great deal. I think now that we know that these are the causes of most of our sicknesses. I think now they ought to tell us what they feed on. Why do they kill? We don't care to know how many it takes to kill a guinea pig, but what gives them nourishment? If

we can destroy the food that they get why do we give them a chance to kill us. I think that is the point they ought to give us; what do they feed on?

DR. STEINGRAVER—I think the Doctor has struck the key-note; what do they feed on? We notice that in planting certain crops in a field, after a certain time the soil becomes exhausted, and, as a consequence, the substance upon which that feeds, which we have planted, becomes exhausted, and, as a consequence, we either have to replenish it or else we will raise no more crops. It is the same way in disease; for instance, measles or scarlet fever—these infectious diseases, when they once take possession of an organism they seem to exhaust a peculiar principle in the system upon which the disease feeds, and, after that has once been exhausted, then the person becomes insusceptible to its action. Now, in diphtheria, or any of those diseases upon which these bacteria feed, if we could discover certain means that we could use as a prophylactic measure to destroy that principle upon which they feed, that would solve the question of prescribing for a disease, and would be a great measure in sanitary science. Diphtheria it seems is different from many infectious diseases, in that it renders a person that has once had it more susceptible to its poison afterwards. In that respect it differs from others, as showing that one attack of diphtheria does not exhaust the principle upon which it feeds and multiplies. If we could discover a means that would get rid of that we would of course cut it off and prevent it, and it seems to me that has not been done yet. The so-called toxines, that are in part used, are still in a great measure an experiment. We hear that in some cases they act beneficially; and then, again, in others it produces almost instant death after the patient has been inoculated. In consequence it is not safe to use them.

DR. THOMPSON—I presume that this paper should be discussed. It is prepared more from the light of the sanitarian than the physician, and having the honor and all the other emoluments of being the health officer at my home it is a matter that somewhat interests me. I am not in any sense a bacteriologist, and I have long been inclined to think that our friends who make a specialty of that are whittling it down to a somewhat minute point. I would like to ask for information where these bacilli originate? Now in my duties as health officer I have had contact with a number of outbreaks of diphtheria, and on three occasions, one of which was the most virulent of any I have ever seen. No amount of human ingenuity expended on the problem would account for the presence of the bacilli. I am told by my superior officer in Columbus that I must be continually on the look-out for these little trespassers, yet I can-

not put in all my time with the microscope and attend to the matter. I would like to ask for the experience of others, as well as my own, to justify the belief, whether virulent cases of genuine diphtheria do not spring up without any possible exposure to bacilli; in other words, without direct infection—if that is not the case? There are some very queer outbreaks of diphtheria. And another point that I would like to mention is this: In my section of the country we have quite a goodly number of physicians who are incapable of making a differential diagnosis between what I call diphtheria and the ordinary forms of tonsillitis.

DR. BECKWITH—I believe that every large city ought to have a laboratory of its own, and make its own tests. In almost all of the large cities of the country they have laboratories of their own. In regard to the remarks of the gentleman in regard to what the germs feed on, that requires a great deal of study of what these germs really are. We know that measles and various diseases attack healthy people as readily as they do those who have a lack of vitality. We know that grippe will attack the strongest and healthiest persons as soon as it does those that are not up to the standard of vitality. It is a study we have been investigating for several years, and have never yet come to any definite conclusion. I hope to live long enough to see something definite given us; something that will give us a scientific explanation more than we now have.

DR. MEADER—In regard to what bacilli feed upon. They feed upon the tissue. We have found in investigating their growth that serum, and especially bouillion meat extracts, must be present in order that they will grow. They grow upon nothing else. Some require an acid body and some an alkali.

DR. WUNDERLICH—Then according to that if a person is in an acid state we must give him an alkali to correct it. Is that the idea? Would that cure it?

DR. MEADER—We do not give the alkali to cure it; but you would neutralize it. The alkali would simply affect that portion where the trouble is systemic. In regard to the diphtheria question mentioned by one gentleman, I think I pointed that out in my paper.

DR. ZBINDEN—What kind of a microscope is needed?

DR. MEADER—A common microscope is sufficient, provided you have a power of five hundred to seven hundred and fifty diameters. The lowest power for bacteriological research that can be used is five hundred; the best is one thousand.

SEWAGE DISPOSAL: CHEMICAL FILTRATION.

BY JOSIAH HARTZELL, C. E., CANTON, O.

The city of Canton, with a population of 32,000, and an area of seven square miles, has a storm-water system of sewers for the removal of all storm water, and into this system no household wastes of any description are admitted. For the removal of household wastes, a separate system of sewers is used, into which no rain-water or elevator water is discharged. The general plan of this sanitary system contemplates the sewerage of the entire city by systems of mains, submains and laterals, varying from six to twenty inches in diameter. All laterals are provided at their upper ends with automatic flushing-tanks, and a frequent and regular cleansing of all sewers is thus insured. These siphons are so supplied as to flush at intervals of from eight to twenty-four hours, depending upon the number of house connections made with each individual sewer. The water discharged at each operation of the siphon varies from about two hundred and fifty gallons to about three hundred and fifty gallons. In the maintenance of a sanitary system embracing some seventeen miles of sewers, no trouble has so far been experienced in keeping the entire sewer system, both laterals and mains, clean and free from any adhering organic matter or deposits by the use of this system of flushing. Provision is thus made for the removal of all organic wastes through the trunk sewer to the city sewer farm, located on the main branch of the Nimisilla creek two miles south of the city and outside of the city limits. The sewer farm, embracing twenty-eight acres of land, was originally purchased as land for the outlet, and it was intended that on this land, some method of sewage purification should be built and carried into operation. The subject of sewage purification was early brought to the attention of the city authorities by the complaints made by property owners below the out-fall of the sewer. An investigation of the available methods of purification developed the fact that the ground owned by the city, as well as all other land in the vicinity, was of a formation poorly adapted for purification by broad irrigation or intermittent filtration. The area of land requisite to provide for future requirements by these methods of puri-

fication could not be had except at a great expense, it being then considered that for broad irrigation there would be required some three hundred acres of land, the first cost of which, including the preparation of one hundred and twenty acres to adapt it for the purpose, as well as the expense of a pumping plant, buildings and force main, would result in a total expense of \$155,123. For intermittent filtration there would be required at least fifty acres of land, the preparation of thirteen acres for present requirements, by sloping and underdraining, a pumping plant and buildings, and a force main for lifting the sewage. The estimated total cost of all this was \$45,482, and the annual expense, including interest and cost of pumping and operation, \$3,861.30 The tract owned was, however, so located that the sewage could be brought to it by gravity, and the expense of pumping was thus obviated. Inasmuch as a large area of land would be required for broad irrigation, and as it was almost impossible to obtain for intermittent filtration, a suitable tract of ground within reasonable distance, it was deemed best to adopt the method of chemical purification.

Before proceeding with the construction of the works a special committee of the city council was appointed to visit towns in the Eastern States where purification works had been constructed, and report the result of their investigation to the council for further consideration. This committee visited the several prominent purification plants then in operation in Massachusetts, New York and New Jersey. A plan of precipitation works somewhat similar to that built by the city of Worcester, Mass., was adopted, specifications prepared and proposals ordered. For funds to carry on the work the city of Canton had authority, previously conferred by act of State Legislature, to issue \$25,000 of sewage-disposal bonds; and within this amount it was deemed advisable to limit, so far as could be, the cost of the works complete and in working order.

Ground was broken in July, 1892, and the greater part of the brick masonry and connecting sewers was built during the same fall and early winter. The building was erected during the winter, and the machinery and appurtenances in the spring. The entire plant was in running order by May 15, 1893, and the total cost was \$26,483.76. The plant is contained in a heavy frame building on a

brick foundation, and comprises a boiler and pump room, twenty-eight by thirty feet, lined with brick; a chemical mixing and press room, thirty by forty feet; and a chemical store and slackening room, thirty by forty feet, located above the mixing room. The four precipitating tanks are each fifty by ninety-six feet in plan. When filled they have an average depth of 4.75 feet; the sewage being three feet, ten inches deep in the shallowest, and five feet, nine inches in the deepest part. The capacity of each tank is 171,100 gallons. The sludge is lifted by a horizontal duplex sludge pump and is forced into a sixty section chamber filter press, each chamber being twenty-nine inches in diameter and equipped with rubber gaskets to obviate the tearing of the filter cloths. The press has a traveling head with a hand-tightening gear and quick opening arrangement, with all the necessary relief valves, blow-off connections and air chamber. Water for all steam and mixing purposes is drawn from the purified effluent channel, and is pumped into an overhead storage tank holding 2,200 gallons. From this tank it is drawn off as required.

The sewage is diverted from the main sewer into the inlet sewer just above the city farm. The inlet sewer enters the building at one end under the boiler room floor, and there enlarges into a screening chamber provided with gates and screens for the removal of obstructive matters. Thence it passes through an inlet channel four feet in width to the four tanks located outside of the building. The lower end of this inlet channel connects with a double circulating channel located midway between the four precipitating tanks; two of which are placed on each side of the channel. At the point where the sewage enters the building it receives a charge of milk of lime from the lime mixer, and where it leaves the building a solution of sulphate of alumina is added. The sewage, then passing down the inlet channel, is agitated by baffled-boards within the channel. This insures a thorough mixture of the precipitating agents with the crude sewage before the latter enters the precipitating tanks. On reaching the precipitating tanks, the sewage, so charged, enters the first tank and passes through it to the further end. It is then deflected back and re-enters the circulating channel, from which it enters the second tank. Thence by the same

method of circulation, it passes into and through the third and fourth tanks to its exit over the aerating steps of the effluent chamber; and thence into and through the effluent sewer to the point of outfall in the Nimisilla creek.

The chemicals used, lime and sulphate of alumina, are delivered by wagon into the second story of the mixing-room, and are there stored in their respective bins. The proper charges of lime are weighed out at regular intervals into a slaking tank located on this floor, and, after being slaked with a large surplus of water, are passed down into the lime mixer on the first floor; while the sulphate of alumina, weighed out in the respective amounts, is dumped directly into the top of the chemical mixer, which is also on the first floor. Sufficient water is added to both the lime and alumina solution to facilitate their easy and uniform discharge into the crude sewage. The precipitation process is such that approximately one-half of the suspended matter taken out, is deposited in the first tank and about one-fourth in the second tank, while the balance is equally distributed between the third and fourth tanks. The sludge is removed three times a week from tank No. 1; twice a week from tank No. 2; every five days from tank No. 3; and once a week from tank No. 4. This method of sludge removal gives, as shown by experiment, a uniform daily amount of sludge for pressing, and the best results in precipitation. To remove the sludge from the bottom of each tank, the tank to be cleansed is cut out from circulation, the sewage then passing by it and into the other three tanks in rotation. After standing for some two hours, the supernatant water from the tank so cut out is decanted by means of a floating skimmer-pipe into a clear-water sewer lying beneath the circulating channel and discharging under the lower steps of the effluent chamber, and thence passes into the effluent sewer. When the floating skimmer-pipe reaches the accumulated sludge in the bottom, the sludge is raised to the surface. Then by means of a twelve-inch gate valve, the accumulated sludge is drawn off into a sludge-sewer located under the circulating channel, and discharging into a sludge-cistern placed beyond the tanks and just outside of the pumping-room. From this cistern the sludge is lifted and is forced into a sectional filter press under a pressure of about one

hundred pounds per square inch. From this press the exuded water passes out through the filter cloths and into a gutter beneath, and thence through a drain to the inlet sewer, the solid matters being retained within the press in the form of cakes; and when the press is emptied the cakes fall into a car below, which, when full, is run out of the building on a track. About eight grains of lime and 1.6 grains of sulphate of alumina have been used per gallon of sewage treated. Owing to the large capacity of the precipitating tanks, these proportions give a very satisfactory effluent. As the other districts come to be sewer'd, and the quantity of sewage to be treated increases, a larger amount of chemicals can be added, and thus an effluent can be maintained such as will satisfy all present and future requirements.

The total amount of sewage treated daily now averages about one hundred thousand gallons, from which are obtained, approximately, four tons of sludge cake per day. The raw sludge, as it is drawn into the sludge-cistern, contains, approximately, ninety-five per cent. of water, and the cake obtained from filter pressing contains, approximately, fifty-eight per cent. of moisture. About four presses of sludge per day are obtained, each press making sixty cakes of an average weight of thirty-three and one-third pounds. Thus far no attempt has been made to sell the sludge cake, but no difficulty is found in having the cake promptly removed from the dumping ground by farmers desiring it for fertilizer. The average time consumed in running out a press of sludge cake is, approximately, two hours, which includes the filling of the press, the emptying, and the locking up of the press ready for refilling; but the operation has been performed in fifty-five minutes. The rapidity of operating depends upon the texture of the filter cloths, a closely woven jute material of about fifteen threads to the inch being found most satisfactory, although not as durable as a canvass having forty threads to the inch, such as is used at present.

The monthly expense for maintenance are as follows:

One engineer in charge of the works,	\$60 00	per month.
One helper,	40 00	" "
One night engineer and watchman,	40 00	" "
Coal, twenty tons,	31 00	" "
Lime, fifteen tons,	42 90	" "

Sulphate of alumina, three tons,	60 00	per month.
Oil and waste,	8 00	" "
Filter cloths,	10 00	" "
Miscellaneous,	3 10	" "
Total per month,	\$295 00	" "
	3540 00	per year.

This amounts to 23.6 cents per capita per year with a population of 15,000 persons in the district connected with the sewers, or \$11.19 per million gallons of sewage treated. For an increase in the amount of sewage treated the cost for attendance, coal, and other supplies would remain the same, and the additional cost would practically be only that of the additional lime and alumina required.

Three analyses have been made for the purpose of ascertaining specifically the degree of purification that was being obtained. In all three instances analyses were made, first of the crude sewage, then of the treated effluent.

The first analysis dealt with the effluent after sedimentation only had taken place. It indicated the subsidence of twenty-six parts of the suspended matter.

In the second analysis, made by Allen Hazen, the effluent had been treated to milk of lime. It showed that fifty-nine parts of the organic matter had been removed by the lime process.

The effluent used in the third analysis had passed through the lime and alumina treatment. It indicated that the water had been cleansed of about eighty per cent. of the organic matter in suspension and solution. This analysis was made by H. P. Eddy, chemist of the Worcester, Mass., works. Mr. Eddy complimented the authorities of Canton in very flattering terms on the high degree of purification that had been attained.

The analysis of the lime used shows the following composition:

Calcium oxide,	84.7	per cent.
Magnesium oxide	1.5	" "
Ferric oxide,	5.8	" "
Moisture, carbonic acid and undetermined,	8.	" "
Total,	100.0	" "
Lime, soluble in water	82.5	" "

This is a local lime costing ten cents per bushel of seventy pounds, delivered in the bin at the works. The sulphate of alumina, so far used, is represented as containing insoluble matter, ten per cent., and sulphate of alumina, forty-four per cent. It costs, in a pulverized condition, about \$20 per ton in car-load lots delivered at the works.

The operation of the works has continued to be highly satisfactory to the citizens of Canton, and to the owners of the lower creek valley; and no odors of any nature are discernable at any time about the plant. The authorities are well satisfied with the results of chemical precipitation for the disposal of house sewage.

The sewage of the following cities in the United States is purified by chemical precipitations: Worcester and Mystic Valley, Mass.; East Orange and Long Branch, N. J.; and by the following cities in New York: White Plains, Coney Island, Round Lake, Cobleskill, Oneida, Stamford, Far Rockaway, Cortland, Chautauqua, Fort Plain, Ilion, Camden, Herkimer, Mt. Vernon, Sidney, Lake Placid, Cazenovia, Haverstraw, Echota, and Irvington.

In the following places the plan of intermittent filtration is used: South Framingham, Marlborough, Medfield, Brocton, and Gardner, Mass.; Summit, N. J.; and Oberlin, O.

Purification by broad irrigation is employed at Wayne, Pa.; Greenfield, Mass.; Pullman, Ill.; Colorado Springs and Trinidad, Col.; Hastings, Neb.; Helena, Mont.; Cheyenne, Wyo.; San Antonio, Tex., and by most of the larger cities, not including San Francisco in the State of California.

INTERMITTENT FILTRATION IN SEWAGE DISPOSAL.

BY W. B. GERRISH, C. E., OBERLIN, O.

We will pass by a discussion of the principles on which intermittent filtration acts, or even a history of its development, but will turn to a brief description of how we have applied the principle in the disposal of sewage at Oberlin.

We lay no claim to originality of method. The only unique

feature being the means used to keep the cost at a minimum. But from past experience I presume that in time we will find that these were the methods most approved in the days of the Pharaohs. The work has been experimental from the start. We took each step as we saw the need, and we are still experimenting on the details, not claiming that we have reached the acme of perfection. We can justly claim, however, that the effluent causes no injury to the stream which it enters. The farm causes no annoyance to the neighborhood, and in fact is a place attractive in appearance, while the whole work is accomplished at small cost.

Oberlin is a place of 4500 inhabitants, with six miles of sewers on the separate system. The only possible outlet for the sewers is a small stream which is dry during the summer months. Some kind of purification was consequently a necessity. Twenty acres



of land was purchased about one-half mile beyond the corporation, only about five acres are available for receiving the sewage by gravity. The land on the west of the drive is underdrained and divided in areas for intermittent filtration. On the east of the drive the sewage is disposed of by broad irrigation, the sewage enters the field on the south side, and can be diverted either way. Before entering the carrier ditches the sewage passes through the sludge pits, which are mere enlargements of the ditch, and as the velocity

is reduced a large part of the solid matter is dropped. The sewage then flows to the different areas as desired. Italian rye grass was found to be the best crop to seed with, but the past winter was so severe as to kill it all. We now use alfalfa, red clover, and timothy. Once a week the sludge is pumped into a tank and hauled on to the high land. During the winter the sewage forms channels under the snow and ice, and percolates through the soil as in the summer.

The preparation of the field and equipment cost about \$500, and it costs about \$350 per year to operate the plant.

**REPORT OF THE BUREAU OF OPHTHALMOLOGY AND
OTOLOGY.**

EMMA BOICE, M. D., *Chairman*, Toledo
"Ears."

B. B. VIETS, M. D. Cleveland
"Eye Surgery."

W. A. PHILLIPS, M. D., Cleveland
"Eye Troubles Resulting from Children's Diseases."

THOS. M. STEWART, M. D., Cincinnati
"An Eye Case of Nasal Reflex Origin."

H. B. HILLS, M. D., Youngstown
"Two Cases—Anterior Staphyloma and Treatment."

EARS.

BY EMMA L. BOICE, M. D., TOLEDO, O.

My topic may require an explanation. The department of Otology seemed rather neglected, and as we were promised so many *good* papers on the eye, I ventured in this field, where I had no competition. The treatment of the majority of ear diseases falls into the hands of the general practitioner rather more than to the specialist.

Acute catarrhal and suppurative cases are usually treated by the family physician, the chronic and more severe forms are relegated to the otologist in the cities; while the much abused and long-suffering country doctor must handle all classes of ear disease, and he usually labors under heavy disadvantages. My remarks will not be for the benefit of the specialist, but for the general practitioner, and I hope I may be fortunate enough to say something which will repay him for listening to this paper and to excuse my monopoly of this field.

As a usual thing, diseases of the ear are neglected by the patient and also by the physician. There are several reasons for this.

First: The sufferer from deafness will conceal his affliction as long as possible. We can all recall the ridiculous mistakes made by people who, not understanding what has been said, will make some answer entirely foreign to the subject.

Second: When the friends know of the deafness, instead of urging medical attendance on the unfortunate patient, they urge non-interference, prophesying that he will be made worse instead of better. We all know that in catarrh of the middle ear the tendency is to total deafness if relief is not obtained, and that a favorable result can only be attained by long continued and faithful treatment. People become very much discouraged when they are told that the treatment must extend over years, with a few periods of rest, and are apt to discontinue it.

The third and perhaps most common reason why so little attention is paid by the physician, is that the instruments must always be used in the examination and treatment of ears. These are not always on hand even if in his possession.

But few instruments are required, the use of them is very simple and the cost not great. The most important one is the head mirror, a concave mirror which concentrates the rays of light affording a means of illuminating the canal. This is also very useful in examining throats. If the canal is straight the drum-head may be seen without a speculum, but one is indispensable, with the addition of a powder blower, a cotton holder and Politzer air bag; the general practitioner has an outfit which will answer his purpose and assist in clearing up many doubtful cases.

If a patient becomes suddenly deaf, dizzy, often even unconscious, it is much more satisfactory to look in the ear and see if a plug of wax has not become lodged against the tympanic membrane and not pronounce it apoplexy. Also without the head mirror it is not safe to diagnose ceruminosis and dig for the supposed offending mass, for you may bring forth the small bones of the ear and very seriously damage your patient's hearing. This has been done many times and the disease found to be something entirely foreign to ceruminosis. In every case of supposed ear disease, *look and see what the trouble is and do not prescribe on symptoms.*

A most amusing case was related me by a physician now deceased. He was annoyed by ringing in his ears and a peculiar stoppage, relieved by pulling the auricle away from the head. He was attending a medical convention and Dr. Guernsey prescribed for him. I have forgotten the remedy, but it was one of the higher potencies. He took it faithfully, but obtained no relief. He had some one to look in his ear, who advised a syringe and warm water. It was used. A nice plug of hardened cerumen washed out, and all symptoms relieved.

Homeopathic prescribing, *after* the offending cause is removed, is the correct thing. But you may as well attempt to set a broken leg with apis., because it has the swelling, as to remove a plug of wax, a bean, or shoe button with the thousandth of nux., on account of the sensation and of a foreign body in the ear. To remove hardened cerumen lift the mass away from the side of the canal, thus affording a channel for the water to pass in and get behind it. If after several trials with the syringe the mass does not become dislodged, have the patient pour a few drops of glycerine or sweet

oil in the ear for two or three nights and the removal will be very easily accomplished. Always dry the canal with wisps of cotton, and put in a small plug for the patient to wear home. This is for the protection of the drum head.

The next disease of external canal is furunculosis or boils in the ear. Ocular inspection without the head mirror, will usually reveal this trouble. My usual plan is to syringe the ear with water as hot as can be borne, and then paint with cocaine in benzoinol twenty grains to ounce. Use hot salt bags or the hot water bottle. Internally belladonna and picrate of lime have done the best work. I continue the calcarea picrate 3x after boils have healed to prevent a recurrence of disease. Careful attention must be paid to the diet. I have several patients who will have boils from eating oat meal. They have tried the experiment several times and have had a boil without fail. I do not incise unless the suffering is too great—the disease is more apt to recur.

Among middle ear diseases catarrhal and suppurative forms are found. Many cases of acute inflammation are caused by snuffing water up the nose or by gargling during a cold. There is at first a sense of fulness in the ear then a slight aching, growing worse at night. The drum-head may rupture and a few drops of blood and serum escape, affording great relief. It may go on to suppuration. I advise aconite and belladonna internally, often using them both locally in the ear. Usually I get the hot plantain oil and find it very successful in controlling the pain.

The hot salt bags and hot water bottle are also used. In fact in any form of inflammation of middle ear they are used. These acute inflammations usually accompany the same condition of nose and throat. I usually spray with oil eucalyptus in albolene and advise the use of vaseline for an application to be made at night. This is so soothing to the nasal mucous membrane that it permits of free breathing and assists in reducing the inflammation. If the pain is very severe, use cocaine locally, but usually the warm plantain oil and the indicated remedy suffice. Belladonna, pulsatilla, bryonia, hepar, chamomilla and capsicum. Hepar, if symptoms are very severe and tending to suppuration; capsicum where pain is referred to the mastoid.

Do not poultice. Many attacks of acute catarrhal inflammation are changed to the suppurative form by poulticing. Use the fountain syringe and let a stream of water as hot as can be borne run into the ear very gently. Never use any force. Have the top of the water in the syringe on a level with the ear, otherwise you will make your patient dizzy. Give a light diet throughout the attack, also instruct your patient that he may avoid future attacks by attention to diet and hygiene. Over dressing is one of the most serious faults. The body is kept warm and perspiring all the time and then is susceptible to every change and is chilled. Our houses are kept very warm, and light weight clothing evenly distributed over the body is sufficient for warmth. Put on heavy garments when going out of doors; protect the feet and keep them dry. One very important matter is to stop the patient from wetting the hair every day: in many cases stopping this will cure the case.

These acute attacks are not as liable to run into the chronic form as the milder inflammations, which are felt only as a slight fulness in the ears and are scarcely noticed, except that with each cold the hearing is a little more affected until it finally is almost gone before the patient seeks relief. Then they expect to be cured in two or three weeks; when in that length of time there is no appreciable change, they and their friends decide that treatment is of no avail and discontinue it.

The treatment certainly is discouraging to the physician, as well as to the patient, but it must be persevered in to accomplish anything. Often the inflation by Politzer method will so much improve the hearing after each treatment that the patient is encouraged and will continue and so be vastly improved.

The acute suppurative cases differ but little from the acute catarrhal except in severity. Always examine the ears when a child is screaming with pain, for many attacks of supposed colic are immediately relieved by a discharge from the ear. The attacks may be caused by faulty dentition. I have had discharges cease inside of two hours after the removal of a decayed tooth.

The treatment previous to rupture of drum-head is the same as in the acute catarrhal form. After the drum-head has ruptured, keep the ear clean; have it washed as many times as is necessary

to do it. When the hearing begins to improve, dry the canal with cotton and blow in either boracic acid or any dry dressing.

Whenever the powder becomes wet, have the ear dried and put in some more. Give the indicated remedy, and do not depend on ear symptoms, but consider the whole condition of the patient. More frequently you will be confronted with the chronic cases, and here is where your skill as a homeopathic prescriber will be taxed to the utmost.

Cleanliness is certainly next to godliness in chronic middle ear suppuration. Many are discarding the syringe altogether. I always use it, taking care to direct the stream of water against the sides of the canal to prevent dizziness. After washing the ear, dry it carefully with absorbent cotton, pack with boracic acid or dry dressing and let it alone as long as it remains dry. Have the patient come to the office whenever the powder becomes wet, and treat as before.

To cleanse the ear it is often necessary to use carbolic acid in the water or peroxide of hydrogen, to remove the foul pus. The ear must be *perfectly clean* before putting in the powder.

Look after the general condition of the patient, stomach, bowels and teeth. I frequently use Trommer's extract of malt with cod liver oil with most excellent results, at the same time giving the indicated remedy. Tellurium 30x has cured a number of cases when the discharge had the characteristic fish brine odor: graphites, with the moist condition behind the ears. Calc. carb., enlarged glands and sweating on the head. To name remedies for this trouble would necessitate going over the whole *materia medica*.

For when the case is stubborn I study the symptoms and when the proper remedy is found and *given*, the patient gets well. I am free to say that every case of this kind when properly treated and prescribed for, will get well, and when it does not, it is because the proper remedy has not been found, for in no class of disease does homeopathy show more brilliant results than in chronic suppuration of middle ear.

As I have said before, this article is not for the benefit of specialists, and I have only taken up the most common diseases met with by the general practitioner, and those which must be treated by him without the outfit of a specialist.

DISCUSSION.

DR. PHILLIPS—This matter of cerumen is something that should be thoroughly understood. You should all recollect that hardened cerumen never occurs in an ear except as a sign of other troubles. There is not a chronic aural trouble that does not have this in some form more or less. It is a matter of fact that we have more hearing power than we know. The result is that we can lose a part; indeed a large proportion of our hearing power and not very perceptibly miss it; so that before the patient gets into the hands of the aurist he has lost not far from two-thirds of his hearing power without being aware of it. It is not a good rule to wait until disease is cured for the eyes to get well or the ears to get well. They do not get well that way. A syringe is the worst thing you can put into the hands of a patient for the purpose of cleanliness. You can take water into the mouth or throat, but you take water into the nostril and you cause a cold right away. The mucous membrane of the nose and ear is intolerant of water, and an otherwise bland discharge that would cure itself is augmented and kept in active existence. You put a syringe with water in the ear once or twice a day, and unless you use some curative measure you are liable to constantly increase the trouble you are trying to overcome. Now, another thing, and that is the use of boracic acid. That has a great reputation, and when properly used is an excellent means; but many a physician makes the mistake of trying to cure a suppurative discharge too quickly, and he begins by using boracic acid. I have seen some very severe cases that I believe had been converted into that condition from a former and far less trivial state. If I found use for boracic acid, first clear out the ear with a tooth-pick wrapped about with some absorbent cotton, then again dip your wrapped tooth-pick in the boracic acid and apply it. I tell you beware of a syringe.

DR. MAXWELL—I am pleased with the remarks of Dr. Phillips, and have learned one thing, and that is, that the mucous membrane of the ear is intolerant of water. He also says that where you find a hardened cerumen it is due to chronic aural disease, and you can always stick a pin there. I had the case of a lady deaf for years; at least three and a half or four years. She came to me for examination. I examined the case and found the canal nearly full of hardened cerumen. In that case I couldn't force the cerumen to one side to allow the water to pass back of it. I could simply fill my fountain syringe and throw a stream on the hardened mass until I had washed it away. It took three or four hours to do it, and when I was about ready to quit I noticed a very black hard-

ened substance there that wouldn't wash away as the cerumen did. I took a tooth-pick, or some small instrument, and dislodged it, and found that it was a small hard-shelled bug, which had got into her ear in the night. She had called in a physician who had dropped in a few drops of chloroform, and she supposed the bug had been dislodged and come out. The bug was still there, and was the source of irritation. I suppose the bug caused the catarrh, and the catarrh caused the deposit of the cerumen.

DR. QUAY—The evil practice too often indulged in of washing the head every day is a most pernicious and crying one. You get a man who wets his hair every day, and in many such cases you will find ear troubles and also catarrhal troubles. The patient will often ask you how shall I clean my scalp? I advise them to use bay-rum on a bit of sponge or linen rag. You will get it much cleaner than by daily sousing it.

DR. CROFT—Recommends the use of bicarbonate of soda in the water as an application to the hardened cerumen.

DR. STEWART—I have recently had a case of suppurative otitis of five years duration. I made an examination and found the drum intact; it had never been broken down. It was a case of attic disease. Peroxide of hydrogen and boracic acid had been already carried to the limit. Proper treatment in that case was the removal of the drum-head and bones, which was done, and cured the case.

DR. BECKWITH—I have washed my head in cold water for fifty years every morning and never had an earache.

DR. WILSON—But he has had lots of catarrh to my certain knowledge.

DR. MAXWELL—It is very evident he has washed all the color out of his hair.

DR. T. P. WILSON—I appreciate as well as any of you who are here the growing interest of these specialties on the part of the general practitioner. You have brought them forward to a certain amount of perfection. We find much of our income diverted into the general practitioner's hands through special information which they have received from us. I wish it were possible to say to all general practitioners "send your eye and ear cases to us," but a goodly number of them wouldn't do that because they live so far away from the centers of civilization, so they just try to treat them intelligently. Dr. Boice's paper is worthy of your consideration. On some points she is not at her best; she needs to make some things more clear. In the first place, if you have a case of chronic suppuration, or any substance pouring from the ear, it needs to be cleansed. In case it is such a one as is connected with a perforation of the ear-drum that should be promptly attended to. It is on

its way out; it comes from the middle ear and works its way from an opening in the tympanitic membrane down, leaving the fountain of trouble in the middle ear without proper treatment. A good way to get at this is to clear out the meatus auditorium and get at the trouble. Don't use a syringe if you can help it. That is bad practice in any case; I mean with suppurative conditions of the ear. Wind some cotton around an ordinary match and push it into the ear with a twisting motion, and keep up that with fresh pledgets until you can bring all of the tympanum to view by dry wiping. Every man and woman of you ought to have a Politzer bag; you should learn to inflate the ear. The pus still lies behind the tympanic membrane. Put the tip in the patient's nose and blow out all the matter that you can; blow it away from the tympanic membrane into the meatus externus. Then you are proceeding scientifically. Then blow and wipe until you have got it clean. Don't think because you have wiped off the surface of it that you have accomplished your work. Then you can apply, if you choose, boracic acid. You must turn your patient's head down, and carefully put into that ear the dressing and pack it full, and seal it up with absorbent cotton, and let it remain there until the pus is done running out. A few applications will help promptly. As to pain in the ear. The use of the fountain syringe—nay I say it—is detestable, and it is certainly dangerous. I may say, in most cases, it is to be avoided. If you want to ameliorate pain clear out the meatus carefully by wiping, take a little sponge that is conical or absorbent cotton, dip it into hot water, begin with warm, then drop it into the bottom of the ear as hot as can be borne. You can treat the smallest baby on your lap in that way; you can drop that water into their ear, and they will lie as quiet as a cooing dove. Chloroform doesn't compare with the relief obtained in this way.

DR. STEWART—Free drainage is desired in these cases. Personally, I do not pack the ear with boracic acid or any other preparation. I cleanse with peroxide of hydrogen and the bichloride of mercury. Then teach the patient how to dry the ear with cotton, as has already been described.

DR. BOICE—Dr. Phillips says he could not understand why the general practitioners do not pay more attention to the eyes and ears, and, perhaps, it was because they were willing to take them just in a general way. I don't know whether it was the fault of the instruction in college or not. While I was in the general medical college I went to the eye and ear man, for I must say with all candor that I didn't know anything about eyes and ears when I graduated. I went to the professor of that department and asked him if he would give me private instructions. He said, "It doesn't

make any difference; you will never do anything in this line any way; it doesn't make any difference; just send your cases to a specialist." I was willing to pay him for the instruction.

A MEMBER—What school did Dr. Boice attend?

DR. BOICE—I attended two schools, one in Cleveland and one at Ann Arbor.

DR. FAHNESTOCK—In regard to treating chronic suppurative processes going on, I have seen cases go on fifteen or twenty years. I have seen the boracic acid treatment, and I think that the boracic acid piled in there in that way irritated the process and keeps it up. It is a source of irritation as Dr. Stewart as wisely remarked, doubtless he would have removed the drum-head and ossicles and hastened the cure. I used alcohol and water half and half, and have stopped that suppurative process where it has been going on for thirty years, keeping the ears perfectly dry and giving the indicated remedy.

TENOTOMY OF THE OCULAR MUSCLES IN HETEROPHIA.

BY B. B. VIETS, M. D., CLEVELAND, O.

Perhaps no subject in all ophthalmology is receiving more attention and close study than the ocular muscles, and the part they play, when in an unbalanced condition, in causing reflex disorders. The subject is comparatively a new one. It is only about six years ago when the medical profession were laughing at seemingly ridiculous declarations made by Dr. Stevens, of New York, concerning the extrinsic muscles of the eyes and functional disturbances, that could be cured by operations to restore their lost equilibrium. There was a time, many years ago, when sufferers from headache, eyeache, nervousness, and the manifold complaints super-induced by eye strains were blistered, bled, and dosed, or treated homeopathically, but all to no avail. Finally, the discovery was made that glasses, correctly fitted, gave relief to many where medication had been of no benefit whatever. In errors of refraction the primary cause of much suffering was located. Still in a certain per cent. of cases where the refraction is at fault, where glasses have been correctly fitted and used according to directions, no relief is experienced. While the subject of muscular asthenopia is

an old one, Dr. Stevens was the first to undertake to give relief by partial or complete tenotomy. The operative measures recommended by Dr. Stevens excited much controversy, which has not yet subsided. Still I do not think there are many ophthalmologists in the country who cannot recite many cases where almost miraculous results have been attained by tenotomies in the relief of epilepsy, agonizing headaches of years standing, nervous prostration, sciatica, etc. Notwithstanding the good results attained in thousands of cases reported, there are comparatively prominent physicians who see contra-indications to all operative measures. Dr. Geo. M. Gould says:

"I believe that in a few years from the present time there will be little or no tenotomy in cases of insufficiency of the extra-ocular muscles. I protest that the whole muscle question is not a muscle question at all; that the origin of the whole trouble is not in any periperal organic defect, but that it is almost entirely of a central origin. There is disease of the nerve centers not of the muscles themselves."

Such twaddle deserves no more respectful answer than the often-heard remark that "if some folks didn't talk they wouldn't say anything." The oculist who has repeatedly by tenotomy relieved patients who have suffered for years—having been treated perhaps by eminent physicians of the different schools of medicine—will be influenced more by the teachings of his own experience than by the harpings of some one who has no practical knowledge of what he is writing about. It is utter nonsense to talk about diseased nerve centers to the physician who has made careful dissection of the extrinsic muscles, and found weak, undeveloped muscles opposing strong, abnormally developed ones, or has found malformations in way of the attachment of certain muscles, or to one who has when operating for marked cases of exophoria made complete tenotomy of the external rectus, and found no appreciable change in the position of the eye-ball. And still let it be remembered that the feeble, delicate, internal recti muscles in this case, without strength enough to turn the eyes in when the opposing muscle is cut off; have for years, in some way or other, not only prevented the strong external muscles from turning the eyes out, but have

actually overcome the tension of the externi, and turned the eyes in when the sight has been fixed on near objects, thereby maintaining binocular vision. This, of course, has been accomplished by the guiding sense of the eye inciting a tremendous nerve impulse to the weak muscles, explaining in a single sentence the cause of so many ocular reflexes. One well-known oculist proclaims that tenotomy is of enough value to warrant the careful testing of each patient for possible errors, and in the absence of relief from all other methods to try the effect of tenotomy or orthoptic exercise. In other words, having traced the cause of suffering to eye strain, everything else is to be tried first, then if there is enough of the patient left to experiment upon, try tenotomy.

For the sake of groaning humanity I am thankful we do not philosophize in this manner. Now a surgeon's popularity and success depends not so much upon his skill as an operator, for that part is easily acquired, as upon his skill in diagnosing. To determine just the proper thing to do in a given case, whether to operate or not, and when and how, are matters that test the ability and intuitive capacity of the surgeon. There is a large class of patients who are great sufferers. They have headache, backache, pelvic pains, are very nervous, etc. Tenotomy of one or more of the ocular muscles, stretching the anal sphincters, removal of an ovary, or other seemingly formidable operation, gives relief for a time at least. But because enthusiastic, incompetent, diagnostic surgeons fail to permanently cure this large class of neurotics, should not bring any operation into disrepute, and this is just the point I wish to make. Diseased nerve centers cannot be cured by operation; peripheral organic defects in the ocular muscles do exist, and can be cured by operation. The ocular surgeon to-day has at his command instruments to determine, without possibility of mistake, the presence of heterophoria. However, in but a small per cent. of cases where there is loss of equilibrium is an operation demanded. In my experience many times high degrees of exophoria can be overcome by gymnastic exercise of the weakened muscles. The rule to determine the existence of diplopia, with a red glass before one eye, and operate if there is a double image and depend upon exercise if there is not, my experience has proved to be a safe

guide in these cases. Operating as I do where there is diplopia only, nothing short of a complete tenotomy will suffice. The operation is simple. With fixation forceps take a deep, firm hold of the eye just back of the insertion of the tendon. The first snip of the scissors should make an opening through the conjunctiva capsule and tendon. Then with point of scissors widen the incision until the borders of the tendon are entirely divided. The fixation hook should not be used at all. Test with the phorometer, if the effect is too great put in a suture or two; if not fully corrected muscular exercise will readily overcome the few degrees of insufficiency remaining.

DISCUSSION.

DR. T. P. WILSON—I wish to make this suggestion to the author. I think he will find that in attributing originality for his topic to Dr. Stevens he has made an historical error; because Dr. Stevens himself, in his first notice of his own work, attributes his first ideas to a French physician, whose name if I knew what it was I wouldn't be able to pronounce it. So we are indebted to a French oculist for this particular direction in which Dr. Stevens has won such wonderful results. In operating for heterophoria we should never use a hook he says. That depends to a great extent on the anatomy of the parts. They are so unlike in different eyes that we cannot avoid the using of the hook sometimes to bring down the wandering fibers of the muscles. With the exception of that item I very cheerfully approve of the Doctor's paper.

DR. STEWART—I think Dr. Viets laid particular stress on *not* using the hook.

DR. REED—I merely wanted to ask a question. Of course this subject of defects in the ocular muscles is receiving a good deal of attention. It is looked upon by different men from different standpoints; some considering the muscle to be severed as a weak muscle, others considering the muscle thus severed as a strong muscle; some considering that the muscles is attached too far forward anatomically, others that it is too far back, and in others that there is a deviation in the anatomical location of the maculæ. And still we are more or less at fault in regard to the functions of these muscles, and why they act as they do. Sometimes you will find a hyperphoria seemingly persistent. I have known of one case in which right hyperphoria persisted one and a half degrees

measured by the prism; that persisted for three weeks at a time steadily. At every examination, and about the time that I began to think an operation was absolutely necessary, it would flop over and become a degree and a half of left hyperphoria. These are cases that we meet, and I want to ask the question whether we are to understand Dr. Viets that as soon as we detect an ocular defect of any great importance—if that necessitated an operation how he would account for the correction of an exophoria, or an esophoria correction, or a little over-corrected, and then at a subsequent examination still find as much exophoria and esophoria as he had corrected, how he will account for that and these peculiarities? I would like also to know what his ideas, or that of any other eye surgeon, was in regard to developing the so-called latent heterophoria?

DR. VIETS—In answering the Doctor's question I would say that there seems to be this element of neurosis entering into these cases of heterophoria. I have seen what would measure one day five or six degrees of exophoria, and on another day measure twenty-three. It is a neurotic condition. This cannot be cured by operation. It is where you get peripheral organic defect in other abnormal developed muscles, or weak muscles, that you can restore the equilibrium of the balls by operation; but you cannot do that in these nervous conditions.

NOTES ON EYE AFFECTIONS FROM CHILDREN'S DISEASES.

BY WILLIAM A. PHILLIPS, M. D., CLEVELAND, O.

The impression prevails among general practitioners and the laity that measles, scarlet fever, and whooping cough are the sole cause of inflammatory and paretic troubles following in the wake of the above diseases. That they sometimes are is true; that they are frequently the immediate cause in part is also true; but that the persistence of eye symptoms after the constitutional disease is entirely cured, is almost invariably due to the presence of an error of refraction, is a fact not generally recognized. As a result the family physician wastes his energies in trying to do with medicines, internally and locally, what only properly selected glasses can accomplish. The explanation of the matter is, that previous to the

onset of the disease, the child had sufficient muscular strength of the eyes to overcome the error of refraction wholly or in part, but when the muscular tone of the eyes reduced by the depressing influence of the general disease, then the eye strain became a permanent factor in perpetuating the eye symptoms.

Blepharitis marginalis is the eye trouble most frequently engendered, and measles are most frequently the cause of this condition. Measles also have a marked tendency to produce paresis of the ciliary muscle, and hence the difficulty experienced by the child in using the eyes for reading and the like. The accommodation is impaired, and the effort necessary to adjust the eyes is the cause of the congestion, the weariness, and even the pain that occurs in the use of the eyes for near work. The blepharitis is no doubt produced mainly by the continued congestion.

The weariness of sight induced by weakness of the ciliary muscle is likely to be followed by a tendency to strabismus, as the effort to make the weakened ciliary muscle do the work of one in its normal tone, produces through associated movement undue traction on the internal recti muscles; and hence too great convergence of the eyes exists for the normal amount of accommodation. In some cases, however, the internal recti are also paretic when there is dynamic exophoria (divergence), and in the more severe cases an actual turning of one eye outwards. Cases of this type rarely cure themselves, and are not often cured by medicines alone. The error of refraction must first be corrected, when internal and local measures will aid in restoring the vigor of the affected muscles.

The headaches that accompany weakness of one or more muscles of the eye are, of course, purely reflex, and are often mistaken as being due to other causes, particularly by irritation of the stomach which is a result and not a cause. In the high grades of the trouble the nerve centers themselves become implicated, and nervous prostration of greater or less severity may render it impossible for the patient to continue school work. General practitioners can do a fine turn here for "Young America," by early detecting errors of refraction as the cause of headaches and various nervous manifestations, and seeing to it that optical corrections are made before serious harm has placed children in a condition to require a

long line of treatment and absence from school. In short sight especially lurks great danger by the future usefulness of school children.

AN EYE CASE OF NASAL REFLEX ORIGIN.

BY THOS. M. STEWART, M. D., CINCINNATI, O.

In harmony with the resolution passed at the 1894 meeting of the Homeopathic Medical Society of Ohio in Toledo, the following case is reported. Not that it supports the resolution in the sense of verifying the curative action of drugs, but it shows that Hahnemann's injunction to search for the cause of disease and to remove it is a necessary step in the cure of disease.

CASE.—A young man, an engraver by occupation, aged twenty, complained that he could not use his eyes for near work without great fatigue. After reading for a short time he had considerable headache. In consequence he was compelled to give up his position and place himself under the care of an oculist. Tonics and rest of the eyes gave no relief. Neither did treatment directed to a muscular trouble of the eyes. The condition grew steadily worse, and several weeks discomfort was occasioned by the appearance of double vision.

The case then came into my care. Examination showed insufficiency of the internal recti muscles, or exophoria. Refraction showed simple astigmatism. Correction of the error of refraction and prismatic exercise for one month made no improvement, though the muscular trouble was corrected.

Internal remedies were also tried during the last two weeks of the first month's treatment. Remedies apparently well indicated gave no relief in any potency.

I then made a thorough physical examination, and could find no abnormal condition other than a spur on the right side of the septum. After cocainizing the projecting point, reading was pursued with more comfort. After the effects of the cocaine had passed off, the tired feeling returned on attempting to use the eyes. I was sure that this was the cause of the trouble, for cocaine applied to other parts of the nose gave no relief, but a second application to the spur on the septum was followed by relief. The spur

was then removed with the nasal saw. The patient soon felt that the eyes were better, and Jager I was read without discomfort.

Four months later patient reported no more trouble with eyes or head, and he had resumed his duties as an engraver.

After the failure of glasses and other treatment, the question why they failed, came up for consideration. From the facts that the patient suffered to such an extent to give up his position, that he was relieved by a simple operation, that sufficient time elapsed to confirm the correctness of the diagnosis and to justify the treatment, we think the question answered.

TWO CASES OF ANTERIOR STAPHYLOMA AND TREATMENT.

BY HOWARD B. HILLS, M. D., YOUNGSTOWN, O.

In all operations on the cornea, there are, in the main, two desiderata to be kept in view: First, to preserve its transparency, and, second, its symmetry. Those of us who have had much corneal work to do know how difficult at times this task is of accomplishment. Our text-books tell us how to clear up an opaque cornea, so we try all their remedies and applications, only to fail in their use. We are equally unfortunate with what information we get from our journals. More than once we think we can clear up the next cornea as nicely as we did the last one, but failure overtakes us. I am free to say that no disease of the eye has brought with it more surprises to me than keratitis, surprises agreeable and disagreeable. We know that it is obstinate in its response to treatment, and that, as a rule, sooner or later both eyes become involved. The complications I shall not consider, but points probably worth mentioning here are the unexpected results after a severe attack in which the corneal tissues clear up beautifully leaving no trace of the disease, and the unexpected results of a comparatively light attack in which the tissues remain opaque with possibly an anterior staphyloma added. When no ulcer is present I invariably depend on the indicated remedy together with an antiseptic wash to keep the eye clean, but when they do I promptly apply the

actual cautery. I know the cautery has its objections, but its work has been more satisfactory to me than that of any other method I have tried for this purpose, but the operator must see to it that the eye is kept pretty securely bandaged until the region cauterized is pretty thoroughly healed. In the first of the two following cases the anterior staphyloma was clearly the result of the application of the cautery, but the patient was intractable and persisted in slipping off the bandage whenever the opportunity offered. Not only did he slip off his bandage, but would lie face downward a good portion of the time, giving as a reason therefore that such a position gave relief.

E. L., aged about twenty-eight years, resident of Youngstown, was first seen at his home, January 10, 1895. Three days before, while taking the head out of a barrel of pickles, a piece of rusty iron from the hoop he was driving became embedded in the lower and outer quadrant of the cornea of the right eye. At the time of the accident the nearest doctor was called, but failed to entirely remove it. I found what remained in the tissues to be deeply buried and surrounded by an ugly ulcer. There was much tenderness in the ciliary region, iris congested and somewhat contracted. Aqueous too hazy to penetrate, great ciliary injection, photophobia and lachrymation, tension about normal. The ulcer was scraped out as thoroughly as possible, the iron removed, eserine instilled, the eye carefully washed with boric solution, and dressed with iodoform. Rus. tox., 2x, and merc. con., 12x, was given internally. He seemed to improve till the 15th, when the ulcer sprang up again, even more angry than before, and I was compelled to make a pretty extensive cauterization.

On the 18th I found I had an anterior staphyloma to deal with. Paracentesis was performed and repeated every day or so, as the case seemed to require. The cornea improved rapidly in every respect except that the staphyloma wouldn't "down." I concluded, therefore, that before the tissues I had cauterized healed, I would make a guy rope of the iris and see if I couldn't pull the protrusion backward by that means. A few drops of a weak solution of atropine were instilled and when the pupil was sufficiently dilated, I punctured the apex of the staphyloma and bandaged the eye. The next morning my object was gained, for the iris had caught in the puncture. Bandages and boric acid solution were employed for three days, paracentesis, as before stated, whenever deemed necessary. At the end of that time I began the instillation of a four

grains to the ounce of atropin and fully dilated the pupil. One week after this I found my cornea approximately symmetrical and healing nicely. A Graefe knife was then used to cut the iris close to the cornea and set it free. When I last saw the patient, there was a pronounced opacity at the point of cauterization. His vision was OD $\frac{20}{100}$ OS $\frac{20}{80}$ with a + 3.50 DS = + .50 cy ax. 90 before the right eye vision equalled $\frac{20}{40}$, and with a + .50 cy ax. 90 before the left eye vision was $\frac{20}{30}$. What his vision in the right was before he was hurt I do not know, but we can reasonably assume it was not perfect. As I had reason to expect a permanent opacity at the point cauterized, there seemed to me no objection to employing the iris in the case as I did.

F. G., age about forty years, was operated on July 12, 1894, for anterior staphyloma; right eye, lower quadrant, of the cornea. The protrusion was so large that it was impossible for him to close his lids, though its transverse diameter was not more than than $\frac{1}{8}$ of an inch. Three years before the sight in that eye was lost through an accident at the mills, and my one object in operating was to save him an enucleation. As the anterior chamber was fully supplied with aqueous, this case is possibly interesting from the fact that a part of the cornea was cut away and the edges brought together with little or no loss of the aqueous, and the wound healed, leaving a well-rounded cornea, and no return of the trouble. The operation is as simple as it is old. Four sutures were passed through the base of the protrusion, and drawn sufficiently tight just to bring the two edges together when the surplus tissue was removed and the cut edges carefully patted down with a hard rubber spoon, and the sutures relaxed till the edges fell into nice apposition, when the eye was bandaged. Of course an asymmetrical cornea remained, but I have reason to believe it was not considerable. The unfortunate feature of this case is that he had no vision in that eye with which to determine the full results of the operation.

REPORT OF THE BUREAU OF LARYNGOLOGY.

C. H. STRONG, M. D., *Chairman*, Toledo
G. H. QUAY, M. D., Cleveland
"Papilloma of the Tonsil."
P. T. KILGOUR, M. D., Cincinnati
"A Nose Case."

PAPILLOMA OF TONSIL.

BY GEORGE H. QUAY, M.D., CLEVELAND, O.

The following case was referred to me by Prof. Mosher, vocal instructor in Oberlin Conservatory of Music:

Miss S., age twenty years, family history good. For several years supposed she had an enlarged tonsil; three years ago had scarlet fever; since that time the tonsil has increased in size. The expression of the face and the voice are such as are usually met with in patients with tonsillar hypertrophy. Occasionally has slight attacks of sore throat, usually relieved by simple home remedies. Her object in seeking relief was for aid in the use of her singing voice. On examination I found an enlargement of the left tonsil, extending to the right pillars, the upper surface of the tumor presented a warty appearance, surface in shape somewhat similar to a mulberry, but not particularly red. After injecting four per cent. cocaine, I carried over the tumor the wire snare, anticipating severe hemorrhage. I slowly tightened the screw. After cutting probably two-thirds through I was unable to completely sever it on account of its hardness, so finished with the Mackenzie tonsillitome. For ten to fifteen minutes there was severe hemorrhage, cocaine spray did not relieve it, but ceased immediately on using a five per cent. chloroform spray. The patient was taken from the office to the hospital, kept there twenty-four hours, bleeding not recurring she was then permitted to go home.

The question arises what was the growth, sarcoma benign tumor or simple hypertrophy of tonsil?

Sarcoma of tonsil occurs before thirtieth year. Usually, but not always, accompanied by glandular enlargement, pain frequently not present until ulceration begins, but its growth is more rapid than in this case.

In simple tonsillar hypertrophy usually find both tonsils enlarged, though one may be somewhat larger than its fellow, also may have frequent acute tonsillar attacks.

In favor of benign tumor we have its slow growth, absence of pain, the only inconvenience being sense of obstruction, non-enlargement of neck glands, right tonsil not enlarged; furthermore, the general appearance of the tumor did not resemble tonsillar

hypertrophy. The specimen was submitted to Dr. J. E. White for microscopical examination. He reports it papilloma.

One month after the operation the patient comes at my request for examination. The cut surface of the stump is well retracted behind the pillars, yet it shows the characteristic warty appearance. A thorough examination fails to find the tonsil, which has evidently atrophied, or, in other words, the papilloma has grown at the expense of the tonsil.

The main points of interest are: First, a tumor of this size in the throat for several years without giving more decided inconvenience. Second, the growth of the tumor, to some extent, at the expense of the tonsil.

The question arises, is the case cured? I do not claim so, but if the remaining portion enlarges I shall remove the whole mass, thereby taking the surest method to prevent its recurrence, or degenerating into a malignant tumor.

A NOSE CASE.

BY P. T. KILGOUR, M. D., COLLEGE HILL, O.

In this day of reflex neuroses and sympathetic complaints, a case will serve to emphasize two points, the importance of which are frequently overlooked, viz.:

1. The necessity of careful examination.
2. The paramount importance of reflex conditions.

Prof. C., formerly a cadet in one of our National institutions, whose medical supervision is of course under allopathic domination, came to me in January last complaining of a throat trouble. Incidentally he mentioned that he had been compelled to leave the institution on account of divergent strabismus, for which he had been operated a number of times, but always with indifferent results. He complained of a dripping from the posterior nares into the throat, of difficulty in breathing, especially when engaged in active physical exercise; in fact, he never could engage in athletic sport, he said, on account of difficulty in breathing; would have to stop every few minutes to catch his breath. I noticed a

peculiar stuffy, nasal tone, and suspected trouble in the upper air passages, but the most careful inquiry elicited nothing that would point to the trouble as being of recent origin, but rather of many years' standing. He said he had been for years in very much his present condition, with the exception of a slight aggravation of the throat trouble, which induced him now to seek aid. On asking him to perform forced breathing with each nostril separately, it was found that there was almost complete occlusion of the left side.

Examination disclosed a remarkable state of affairs. The right nostril was in a fairly good condition, with considerable posterior thickening and a morbid hypertrophy of the middle turbinatal body, but on the left side it presented the appearance of a *solid mass of flesh*, completely occluding the passage between the turbinateds and the anterior portion of the bony septum, with the exception of a slight opening along the floor of the nose, into which a small probe could be introduced, and about the same degree of opening above the mass. Cocaine had no effect whatever in clearing up the trouble, the mass still persisting. Of course it was taken for granted that the surgeon specialists at the above mentioned national institution had examined the nose, had found the anomaly, but thinking it of no moment had deemed it unnecessary to operate. The patient stoutly maintained, however, that in all the cuttings about his eyes—and they were so numerous he could scarcely keep track of them—there had never been a single examination made of his nose. Here, then, was a possible reason for all the baffling results from attempts at straightening the eyes.

Treatment. After thorough cocaineizing, I passed a long, slender, probe-pointed bistoury into the lower opening, and cut up completely through the nose, keeping well to turbinateds, so as to be able to cut the mass completely out on the septal side if necessary. The bony septum was found to be exostosed, rendering it difficult to get through readily, but by diverging to the outer side a complete division was made. A profuse hemorrhage ensued, which was promptly checked by a plug of absorbent cotton saturated with full strength (15 volume) hydrogen dioxide. The bleeding persisted for several days at each time of dressing the parts, but persistent plugging forced the divided parts asunder; they healed kindly, and a wide-open natural state of affairs was the result.

The indicated remedies, *kali bich.*, *hydrastis*, etc., were given and in a short time easy and natural breathing could be performed with both nostrils, and, *mirabile dictu*, those poor much-cut eyes began to get down to steady work, so that continuous reading, an impossible exercise formerly, can now be indulged in with comfort.

**REPORT OF THE BUREAU OF REGISTRATION, LEGISLATION,
AND STATISTICS.**

H. E. BEEBE, M. D., <i>Chairman,</i>	Sidney
"Keep Your Eye on the Target."	
J. D. BUCK, M. D.,	Cincinnati
H. H. BAXTER, M. D.,	Cleveland
M. H. PARMELEE, M. D.,	Toledo
J. W. CLEMMER, M. D.,	Columbus
M. P. HUNT, M. D.,	Ann Arbor

KEEP YOUR EYE ON THE TARGET.

BY H. E. BEEBE, M. D., SIDNEY, O.

On the fourteenth page of the program for this meeting our worthy Secretary timely and very appropriately admonishes each member in the profession of his duty, when he says:

"Legislative matters, regarding the contemplated medical legislation in the next session of the legislature, will come up for action in this meeting. These matters concern you, concern our homeopathic interests and our students. Heretofore a few members of the profession have looked after these questions. This year we shall need a legislative representative of this society in each county. If legislation goes against us and you, do not blame this society or its legislative committee if you have allowed the 'other fellow' to do the work."

That some legislation is needed is no longer questioned. The profession is becoming aroused to this fact and is asking our lawmakers to try and do something for our relief. As chairman of the Bureau of Legislation in this society I have received numerous letters, of which the following question from a prominent member of the profession is a sample: "What are you going to do about legislation this year? The State is becoming filled with itinerants driven out of other States, by timely and sensible legislation, into our State to the great detriment of our people. Soon we will be overrun with this class, and it is not an easy matter to rid ourselves of the element when once here."

Permit me to quote from an editorial in the *Lancet Clinic*, by Dr. Culbertson, chairman of the Legislative Committee in the Ohio Medical Society: "Quackery is a vampire that sucks the life-blood of the people, and gives no compensatory return except in the nutrition given to the press. This nutrition carries with it the most insidious poison that permeates the body politic. It lowers respect for the press, and like the buzzard that lives on carion flesh, spews upon and defiles every spot that it touches."

First, before efficient work can be done, we should have a thorough and complete organization, harmonious as possible, that we

may be able to present a bill for consideration by our legislators having the endorsement of the different State societies.

It is not enough for one wing of the profession to be satisfied, but the recognized schools must work in harmony. There is thorough organization in quackery, and it is no small power in aborting legislation. The medical colleges are rapidly, and it is believed permanently, elevating the standard of medical education. We never have been found lagging in this good work. Our colleges are ever in the lead, and as the American Institute of Homeopathy was the first National organization to raise the standard to a three years' course, so a greater proportion of homeopathic colleges than the colleges of other schools have now adopted the four years' course.

Some of the questions before us are: Shall we have a State Board of Medical Examiners with a good registration clause, or shall we advise a rigid registration law alone? If we want a board of examiners, of whom shall it consist? Shall the Governor be given full discretionary power to appoint whoever he sees fit, nothing being said of the separate schools, or shall the question of schools be included in the law, that is, a mixed board, no one school having a majority, or shall we advise separate boards?

A free and full expression from this society with instructions to act is the desire of your legislative committee. It furthermore asks for the hearty and working assistance of every homeopathic physician in the State. Constitute yourself a committee of one to agitate the question and influence your legislator in a just and good cause, ever remembering that in unity there is strength.

DISCUSSION.

DR. BAXTER—At the session of the society a year ago the subject of legislation was before the legislature, and this Mosgrove bill was the one that was discussed before the convention of delegates at the Neal House, and was urged by a majority of the profession of all schools. That bill failed. Now we are starting anew. We are not bound by that resolution. We begin all over again. We can

now pass any resolution or take any action on this matter we see fit without being inconsistent. My own opinion is that a good, straight registration law is sufficient and will accomplish the purpose aimed at.

DR. BEEBE—I have a telegram, just received, stating that the old school society, now in session at Columbus, have endorsed the Mosgrove bill without alteration.

REPORT OF THE BUREAU OF OBSTETRICS.

G. W. RHONEHOUSE, M. D., *Chairman*, Maumee
"After-Pains."

J K SANDERS, M. D., Cleveland
"Macrotine in Puerperal Conditions."

WM. WATTS, M. D., Toledo
"Remarks."

AFTER-PAINS.

BY GEO. W. RHONHOUSE, M. D., MACMEE, O.

After-pains may be defined as pains that accompany contractions of the womb, that are continued after the foetus and membranes are expelled. Although usually not very severe they sometimes form a very distressing complication of the trials of the lying-in chamber, and I have known them to be more dreaded than the actual pains of labor. They should be regarded as of a pathological origin, or a pathological condition accompanying a physiological process; the physiological process is the contraction of the uterus in its effort to return to its normal size and condition after the enlargement and other changes incident to pregnancy, and there is no reason why this process should be a painful one. All physiological processes are painless. The action of the heart in lifting and distributing the blood with its many pounds of pressure continues night and day without causing pain. We must seek, then, the cause of this painful condition in some abnormal state of the uterus and its appendages or surrounding organs; in fact when we consider the intimate relations of the uterus with nearly every other prominent organ of the body. We cannot but consider the cause to be any abnormal condition of the vital forces.

The fact that after-pains scarcely if ever follow first labors, but occur with more or less severity after each succeeding one, is significant when we endeavor to trace the course, and in my opinion throws a great deal of light upon the subject. In primipæa the muscular fibers of the womb and abdomen are in a condition to more readily contract, being put upon the stretch for the first time, and the whole muscular system is free from the feebleness and relaxation which subsequent labors induce. The uterus during the process of involution after each confinement never returns to its original size, or entirely regains the firmness of its muscular fiber. It is the experience of many that the stronger the woman is muscularly, the less liable she will be to suffer from this cause. Weakness of the muscular fiber of the uterus and abdomen is the chief cause. There are many other causes that may be considered. A narrow pelvis or any condition that renders labor tedious; tight

bandaging, either before or after delivery, presence of clots, local congestions, injuries to the cervix, all these and others, perhaps, must be considered as causes.

The prevention of after-pains requires a knowledge of medical science. Any measure that will place the pregnant woman in the best condition of health will act as a preventive; proper food, fresh air, suitable methods of dress, such as should cause no compression upon any part of the body so as to obstruct free passage of the blood to any part of the system. I think exercise is the most important, and gives strength to the muscles. Muscles with weak relaxed fiber contract slowly, therefore, painful.

Points to Remember.—1. Do not rupture the membranes before the neck is completely dilated.

2. After the head is born make no traction, but allow the uterus to expel the shoulders and trunk.

3. Do not extract the placenta until the womb is well contracted.

4. After the placenta is delivered excite the womb, nothing does so much to prevent there being severe as pressure outside upon the womb during the expulsion of the child and placenta. Efforts to deliver the placenta should be such as will tend to produce firm contraction, which will expel it without leaving a clot.

In all cases seek to remove the cause. If there are blood clots within the uterine cavity remove them with the hand, or by injections of hot water. A number of remedies will be required. Those most frequently indicated are, perhaps, *caulophyllum*, *belladonna*, *gelsemium*, and *nux vomici*. In selecting a remedy select one that is most suitable to the pains.

CIMICIFUGA RACEMOSA IN PUERPERAL CONDITIONS.

BY JOHN C. SANDERS, M. D., LL.D., CLEVELAND, O.

There are very few remedies in the entire *materia medica* more commonly indicated in the morbid conditions possible to the puerperal state, than is the one I have chosen as the subject of my brief paper.



Cimicifuga racemosa, or as more commonly designated, macrotin or macrotine, which is but its resinous extract. We will consider its applicability to the three puerperal conditions respectively:

(a) The gestative state. (b) The parturient state. (c) The lying-in state.

(a) THE GESTATIVE STATE. In the progression of gestation there may, and often do arise, symptoms strongly demanding this remedy. These may be grouped under four distinct heads:

1. Headache. The headache of cimicifuga is very distressful and quite characteristic. It is not congestive nor inflammatory, but neurotic. It is not pronouncedly a frontal headache, but a coronal and occipital headache, and, especially, the *latter*. It creeps down as if inflicting the medulla oblongata as its radiating center. From this point, as a center, it creeps up to the occiput and over the crown, and reaches down into the temples, especially the left. It is always relieved by the open out-door air. This is a macrotine headache, and especially so when it is associated with nausea, with or without vomiting; for nausea or vomiting sooner or later is an attendant on this type of headache. This character of gestative headache may be very distressful, and may persist through the period of twenty-four hours, with scarcely any abatement, and may require several days for the patient to rally from the sufferings, and depression, and shock. If its character is clearly made out it may be well nigh infallibly relieved by the administration of this remedy in proper potency.

2. The second group of symptoms is made up of a class of so-called dyspeptic symptoms common to the gestative state.

So far as my experience has reached it exerts no marked control over the so-called morning sickness, or the nausea and vomiting of gestation. In the treatment of this malady I never have been able to obtain, in any potency, from this remedy, any satisfactory results. And yet the remedy is relieving many of the slighter yet annoying conditions of the gastro-enteric tract that often enter upon the gestative state. These are faintness at the stomach and sensation of emptiness; transient nausea occurring at any time and capriciously; loss of all appetite, and at times absolute repugnance to all food; pain and regurgitation of food after eating; flatulency and distress-

ful fullness, especially around the umbilicus and through the lower abdomen ; dull, griping pain centered around the umbilicus, taking on a periodic character.

3. The third group of symptoms is made up of the distressful aching of back and limbs, which often complicate the gestative state. Few women escape, especially this distressful backache, which is generally located right across the lower lumbar and sacral tract. This is predominantly relieved by rest and aggravated by motion. This distress sometimes extends down the thighs, one or both, taking generally the sciatic tract for its course. The source of this distinctive suffering, beyond doubt, is the lumbro-sacral and sacral plexus of nerves, and is reflex in its character and from some irritated uterine nerve filament. There is hardly another remedy so broadly and specifically indicated, or so generally relieving of this group of symptoms as the remedy under discussion in one or another of its potencies.

4. The fourth group is the uterine myalgæs so common to the gestative condition. The internal walls in the progression of gestation are just as liable to mycolgic suffering as any other muscular tissue, and this mycolgic suffering is predominantly of a rheumatic type. The distress is as much made up of soreness as of pain. This may be limited to some one area of muscle wall, central or at either side, or may extend and involve the entire uterine front, and from its fundus to its cervical limit. From the outlift of the garments worn for the protection of the lower part of the body incident to the projecting abdomen, especially in the later months of gestation. This disposes the woman to chill, a chill of the lower abdomen, and such chill is very provocative of this form of suffering, and may lead, and sometimes does, right on to a peritonitis, local or general, with abortive complications and dangers. The neuralgic form of distress resulting from such provocation, fortunately predominates. This may be temporary, continuing only for a few days, but it is prone to persist for a long time ; for weeks, and even on to the time of labor, and may enter as a factor in the ensuing after-pains. While there are many remedies that hold a symptomatic relation to this particular group of symptoms, I have found no remedy having a more general applicability or greater

capability of relief than I have found in cimicifuga. In my early experience with this remedy, I felt not a little timidity as to its use in gestative conditions, by reason of its reputed power as a purturiacient; but I am now satisfied it is innocent of all harmfulness, surely so, in any potency possible to a true homeopathic prescription.

Besides these four groups of morbid phenomena, there is a possible condition in gestation not disclosed by any gestative symptom, which forcibly appeals for the ministry of this remedy. This condition hardly admits of a definition, and yet may be designated an idiosyncracy, an exceptional individuality, a habit of predisposition to hemorrhagic labors. This predisposition is an unquestioned heredity, and reaches down from one generation to another. By virtue of the power which cimicifuga is capable of exerting over the uterine forces, I am convinced that it is entitled to the first place as a prophylactic to this hereditary hemorrhagic habits. To wield this prophylactic power most efficiently and surely, it should be administered during the latter months of the gestative period; say from the completed sixth month on up to the time of and during labor. My experience and counsel would be to give the remedy once daily during the seventh month, twice daily during the eighth month, and four times daily thereafter until the time of declared labor, and during labor every two or three hours unless some other remedy should be more symptomatically indicated.

(b) THE PARTURIENT STATE. The power possible to this remedy of promoting and conserving normality of the uterine energies has given it a popular fame as unfailingly inductive of *easy* labors. Whether this popular fame is warranted by the experiences of the profession or not, is still an undetermined question. For one I have never been made to witness any special *ease* of labor secured by the administration of this remedy, whether from its popular use or its use under my own ministry. I doubt seriously its possession of any *easing* power over the labor process, beyond its unquestioned capability of promoting and conserving normality of the uterine forces. With all its possible conservation the biblical decree upon woman still abides: "In sorrow shalt thou bring forth children."

Conceding to cimicifuga only this, namely, that it is capable of

inducing normality of the uterine labor forces, it stands forth as worthy of a high place in the therapy of the labor process. The especial adaptations are to the order of preternatural labors denominated "tedious," and to the following types:

1. Where there is lack of coördination of the uterine contractions.
2. Where these contractions are substituted by pains elsewhere, or upon the stomach in form of severe gastralgia, or upon the bowel sheath in form of colic, or upon the brain in form of cephalagia, or upon the lumbar and sacral tract as in agonizing lumbar and sacral pains.
3. Where the pains, though normally located, are feeble and inefficient, independent of uterine weariness, or exhaustion, or mental shock. I have been witness to the prompt and efficient helpfulness of this remedy in many cases bearing these symptomatic indications, both in the first and second stage of labor. If there is no meddlesome or undue haste in the conduct of the third state, the helpful power of this remedy will be as strikingly mournful as on the preceding stages. I have already given prominence to its efficiency as a prophylactic against the habitual hemorrhages of labor, and which chiefly assail this stage, and the incipiency of the lying-in, undoubtedly following. It can hardly be questioned, then, that a remedy having such power as a prophylactic would be without great efficiency in its immediate use to meet the exigency of hemorrhage in this stage, though not of the habitual type.

(c) THE LYING-IN STATE. The adaptations of this remedy to the abnormal conditions of the lying-in, so far as my observations have extended, are limited to the hemorrhages I have already mentioned, and to the so-called after-pains, when they are either neurotic, as is common, or hemorrhagic in character, which is more common. That the remedy is capable of so valuable a ministry is evidenced by the experience I have again and again verified, that where the remedy had been given as a prophylactic to habitual hemorrhagic labors, or where the occasions of its use have arisen during the labor process, no after-pains of any special prominence have ensued. By reason of its capability to induce normality of the uterine contractile forces, cimicifuga covers alike the morbid

irritability of the uterine fibers, which chiefly constitute the neurotic form of after-pain, as well as the atomy of those fibers which constitutes the after-pain of a hemorrhagic character. I have no satisfactory experience with the remedy in lying-in conditions occurring later than the reign of after-pain distress.

DISCUSSION.

DR. WALTON—I would like to commend the dullness of this paper. I have heard him read many papers before this society which we supposed to be bright, but this one he advertised in advance of its reading as a dull production, and it has proved to be the most interesting of the series. I hope he will furnish us a few more of these dull papers. Use cimicifuga when your patient is doing well, but the cervix is a great big soft one and will not open. That is a clinical condition that will respond to cimicifuga. I used two drachms of the tincture in about a half glass of water and give it every twenty minutes. I don't make many visits. Within an hour you have your baby.

DR. BECKWITH—I advocated cimicifuga twenty-three years ago in cases of pregnancy. I attended the lectures of the eclectic school and it was then used very freely in that school, and recommended as a very prominent remedy to be given in pregnancy. Since that time I have observed its gradual employment by others. This paper is much more scientific than I can write. The cases which he has described to you are very graphic. I use the macrotine in all the various stages of labor from beginning to end. So far as hemorrhage is concerned after confinement I have never had a case where I have given macrotine. I usually commence giving it about the third month of pregnancy, and I give it once or twice a day until the last two or three weeks. I use the third. So popular has been the remedy that I have sent packages to ladies living in the South during the last eight or ten years, and to all other parts of the country where they had removed to from here. These remedies, which are advertised as empirical remedies, are usually composed of the same macrotine. I consider it one of the most valued remedies in the books for this condition that has been spoken of here.

DR. HINSDALE—I would like to ask Drs. Beckwith and Sanders how they distinguish between cimicifuga and caulophyllum?

DR. WALTON—The best way to distinguish is to give cimicifuga at all times.

DR. WILSON—Dr. Sanders' very valuable paper brings up a reminiscence which I cannot very well prevent myself from recalling. It is well known to you that Sir James Y. Simpson introduced the use of chloroform in the lying-in state, which has proved a great success. It was received not only with doubt but with very great opposition by the profession in this country on various grounds. It was brought up in this society and discussed with a good deal of interest, and a certain gentleman, who took his seat a moment ago, took very strong grounds against the use of chloroform which was recommended in a paper which I have read, and in which I advanced the rather radical view that no woman, under ordinary circumstances, should ever come to labor without having her pains greatly mitigated, if not entirely abolished by the use of chloroform. This gentleman, Dr. Sanders, was very strong in his opposition to the idea upon biblical grounds. And I heard him to-day take up the text that he formerly rejected. He at that time quoted the same text which he quoted to-day, that it was laid down in the Bible, that it was a curse upon Adam, and therefore upon Eve—she taking the curse from Adam in that respect—that Eve should bring forth children in sorrow, etc. Therefore pain was an institutional condition and was not to be removed by man or his agencies, it was a punishment for a certain crime she had committed, and that chloroform was an attempt to defeat the ends of divine justice. He placed the question upon a theological basis, but when he said here to-day that macrotine given prophylactically and at labor would obliterate, as it were, or, at least, greatly reduce the pains and make the lying-in painless, I saw that he had forgotton his former discussion and argument about chloroform and the interference with the decrees of Providence. I have had two hundred cases where I have made the lying-in bed one of forgetfullness by the abolition of pain which the Book of Genesis unfortunately discounts. But macrotine is not cimicifuga; it is a property as distinct from cimicifuga as morphine is distinct from opium. The pains can be and should be abolished.

DR. SANDERS—I haven't the slightest recollection of a discussion such as the gentleman has just referred to. I don't think there is any man more ready to use chloroform than I am. If I were a woman—and I wouldn't mind being one sometimes if I could be loved like one—I would never have but one baby without chloroform.

THE PARTURIENT STATE.

BY WM. WATTS, M. D., TOLEDO, O.

Every doctor is thoroughly posted on every point in connection with the care of a woman during pregnancy, confinement, and the lying-in period, for he has had experience and knows exactly what to do, and each one knows better than any one else. So in this case no long dissertation will be expounded on some subjects of which you know more than the writer, but a few odds and ends might refresh your memory and aid to relieve some of the tension from the nerves of the soon-to-be-expected mother.

A systematic course of treatment from the commencement of pregnancy until its close will materially lessen the pangs of childbirth. I mean a course of dieting, exercise, and baths—dieteting by eating from that numerous class of vegetables which easily satisfies hunger, and not from the fat-producing class; little of the nitrogenous foods, still enough to retain the strength and health of every organ in the body in the most perfect condition. The sugars and fats to be used sparingly.

The exercise should be in the open air as much as possible and to the point of feeling tired, not wearied. When one is wearied she has exercised too much and gone beyond her strength. This should be every day, so as to use up the superfluous strength, and not allow any muscle to become stale, neither lame and painful from overuse. The worst thing possible is lying around for several days, and then overworking and tiring the entire body.

The baths should be hot, two or three times a week, with an occasional flushing of rectum and a vaginal douche. Massage may be indulged in and is beneficial. Then for three weeks before expected confinement give daily a dose of pulsatilla in the morning and a dose of cimicifuga in the evening, and the relief from so much of the expected suffering will well compensate the mother for the trouble and time spent in following your directions. Still some will not tell you of their expected confinement until near the end of pregnancy, and among them you may find some things not to your liking. You may find the pains commence low down and

work up, giving lots of pain but no advancement. Give a dose of caulophyllum, and you will find the character of the pains change as by magic, and commence at the top and work down, with labor progressing finely. The longitudinal fibres need toning up, and caulophyllum will do it.

You may find labor obstructed by the cervix failing to relax, and it feels like a ring between the finger and the head of the child. Gelsemium will sometimes relax it, but morphine is more reliable, and will often give the woman two hours sleep when the pains will come good and strong, and finding a relaxed cervix and a dilatable os will speedily terminate the labor. Ergot will hasten labor at any stage, but will give the gynecologist an operation for repair of a lacerated cervix, and probably a lacerated perinaeum also. Leave ergot alone except for post-partum hemorrhage, and then use other and more quickly-acting means at the same time. Never tamper in post-partum hemorrhage; force the uterus to contract.

Douching following confinement is not the best treatment in all cases. Some particular indication may require it. When try it and use it thoroughly and well, but remember our women are not machines, and what is proper and demanded in one case would be death in another. Study the peculiarities of each case and govern yourself accordingly, remembering two lives depend upon your skill and judgment. Coffea and secale in alternation will relieve the majority of cases of after-pains, or at least decrease the intensity so as to be bearable.

REPORT OF THE BUREAU OF GYNECOLOGY.

J. C. WOOD, *Chairman*, Cleveland
"The Operative Treatment of Pus within the Pelvis."

DE WITT G. WILCOX, M. D., Buffalo
"The Surgical Treatment of Uterine Fibroids."

H. F. BIGGAR, M. D., Cleveland
"A Report of Cases."

M. H. PARMELEE, M. D., Toledo
"A New Method of Operating in Urethro-Cystocele."

MARY DENNISON, M. D., Toledo
"A Case."

H. D. BISHOP, M. D., Cleveland
"Physiological Dietetics in the Treatment of Diseases of Women."

THE OPERATIVE TREATMENT OF PUS CONFINED TO THE PELVIS.

BY JAMES C. WOOD, A. M., M. D., CLEVELAND.

That pus within the pelvis, like pus in any part of the body, should be removed by surgical procedure is a surgical maxim which, I trust, has become so much of a maxim that it is not necessary to discuss it at this time. All surgeons at least are agreed that pus within the pelvis is a source of danger, and should not be permitted to make its escape spontaneously. For the last ten years I have followed the teachings of Lawson Tait, and have drained many abscesses from above. Latterly, as most of you know, there is a tendency to approach pus accumulations confined to the pelvis from below. This practice was inaugurated by Pean, who removed per vaginam a uterus for septic bilateral disease of the adnexe. It was later on popularized in France and Belgium by Richelot, Segond, and Jacobs. In this country Pratt, Henrotin, Polk, Edebohls and others have warmly advocated the vaginal route.

Until a year ago it did not seem to be that the interests of the patient were best conserved by sacrificing the uterus when the disease was confined to the appendages, nor do I now think that the latter organ should be removed if the pus is confined to the tubes and the uterus is not extensively involved. There are, however, many cases of extensive pelvic inflammations, the result in the vast majority of instances of primary tubal disease where the uterus is fixed, the endometrium involved, and the pelvic cavity full of exudates, that do not recover fully if the appendages alone are removed and the uterus is left behind. Usually these cases are greatly benefitted by salpingo-oophorectomy, but the diseased and enlarged uterus remains behind as a constant menace to health and comfort. I am not one of those who believe that the uterus is a perfectly useless organ without its adnexa providing it is not too much diseased. On the contrary I believe that it is the chief sexual center in many women, and that it constitutes an important part of the pelvic roof. All of us who have done abdominal work know that there are hundreds of women in the land who have had their ova-

ries and tubes alone removed, and who have regained their health perfectly. But there is all the difference in the world between a slightly enlarged and subinvoluted uterus, and one that is bound down by adhesions twice its usual size, and perhaps helps to form the boundary of a pus cavity. It is hardly possible for a womb thus extensively diseased to so far return to its normal state as not to give rise to future suffering and inconvenience. I am convinced now, as I look over my case book, that I have made many salpingo-oophorectomies, working as I did according to the best light of the day, which were better off had the uterus been removed with the appendages. I have particularly in mind cases of pyosalpinx following in the train of gonorrhreal endometritis. In many of these cases there is extensive cervical injury with resulting deposition of cicatrical tissue, and this in itself calls for a second operation if the uterus is left behind.

From the stand-point of ultimate results, then, the uterus should be removed in many cases of pyosalpinx and pelvic abscess. As to the relative safety of the two routes—the vaginal and the abdominal—I think that there can be but one argument, and that is in favor of the former. There is no operation involving the opening of the peritoneal cavity attended with greater mortality than are celiotomies made for the removal of pent up pus when the entire pelvis is packed with exudates, and the intestines are matted together. I believe that all abdominal surgeons dread such cases. The shock attending the operation is tremendous. The hemorrhage is many times profuse, and can only be controlled by extensive gauze packing, and the mortality, especially in acute cases, is correspondingly high. Then, too, it is a very grave question as to whether or not it is best to disturb the adhesions when the intestines are matted together, as must be done if the operation is made from above. Not infrequently they will reform almost as soon as the abdomen is closed, and very often in such a way as to make them more dangerous than before they were broken up. In chronic cases at least the action of the bowel is often not seriously interfered with by such adhesions, and it is taking chances to disturb them. If, then, the uterus is to be removed this (the breaking up of adhesions) seems to be the only argument in favor of the abdom-

inal route. In favor of the vaginal it may be said, first of all, that the mortality is infinitely less than in the abdominal. The statistics will bear out this statement beyond peradventure, though I am aware that there are those who will dispute the statement. This is true whether the free peritoneal cavity is opened into or not, and in many cases it is not necessary to penetrate the peritoneal cavity, as it is entirely possible to dig the uterus and its appendages from inflammatory exudates without disturbing the intestines. The lessening of shock which this procedure insures when it can be done will surprise one familiar only with the older operation. Another advantage, which is of the greatest importance, is the perfect drainage which the vaginal route affords. Fluids of all kinds more readily select a downward course, and the fluids of the abdominal cavity conform to the law of gravitation. This is secured, too, without the danger of ventral hernia, slight as it is, which attends the abdominal operation. In short, the vaginal route is the most direct one to the pelvic cavity, and the most direct route in all surgical procedures, unless insuperable obstacles exist, is always the best one to select. The argument that it is impossible to retreat in the vaginal operation, after it is once begun, carries with it but little weight for the reason that with modern technique the surgeon is rarely called upon to retreat. Should he be he can do so even better than when a celiotomy has been attempted than when the operation is begun from above. Convalescence is infinitely shorter in the vaginal operation, and the recovery, in the class of cases indicated, is, I believe, more complete.

There is, however, one objection to the vaginal route which must be borne in mind, and which I have not seen mentioned in any of the literature dealing with the subject which has passed under my observation. I refer to the persistence of fecal fistulæ when the abscess opens into the bowel. My experience with these cases is yet too limited to speak dogmatically, but I am inclined to believe that spontaneous closure of such fistulæ occurs less often when they communicate with the vagina than when the abscess is opened from above. In large abscesses communicating with the bowel, when the walls are stitched to the abdominal parietes, the cavity can more readily be packed with gauze than it can be when

the opening is made from below, which promotes the closure of the opening.

It is by no means necessary to remove the uterus in all cases of pelvic accumulations. On the contrary, when the abscess points into the vagina in large accumulations, there is nothing more simple than to open and drain it at its most dependant point. Indeed this may be the better course to pursue when the condition of the patient will not permit of a more radical procedure, even though a subsequent hysterectomy may be called for. This is especially true in acute and subacute pelvic inflammations where the suffering is very great and the prostration marked. On the other hand when the accumulation of pus is found in laparotomies to be limited to one or the other broad ligaments it may be best to close the abdomen after the appendages are removed and drain the abscess from below. This I did in Case 1, and have no reason to regret so doing.

A few words regarding the technique of vaginal hysterectomy. I have tried force-pressure, the Pratt operation, the ligature, and the clamp method. As is well known the majority of the French school still use the clamps or forceps for the purpose of securing the broad-ligaments, as do many of the foremost surgeons of this country. That the clamp is a conserver of time there can be no doubt, and cases will every now and then be met with where one or more forceps will have to be left attached for the purpose of controlling bleeding from vessels beyond the reach of the ligature. While I have used forceps and clamps many times the practice has always seemed to me both barbarous and unscientific. They give rise, first of all, to infinitely more pain than does the ligature, and I believe that the danger of rectal and vesical perforation is correspondingly greater. I have experimented with almost every form of clamp which has been devised for the purpose, and have used them altogether in twenty-two hysterectomies.

My experience with the Pratt method of enucleation is limited to three cases. One of these cases died from secondary hemorrhage, and is the only case of vaginal hysterectomy which I have lost in five years. The other two cases were only attempts, for the bleeding was so profuse that I abandoned the method and returned

to the ligature. I have no doubt but that practice would in time enable me to do the operation successfully and with but slight hemorrhage. However, I have seen Doctor Pratt do the operation four times, and in each instance, instead of being a "bloodless" operation, the bleeding was greater than with the ligature. In fairness to Doctor Pratt I desire to state that the operations I saw him do were all pretty difficult ones. There are, though, certain inherent objections to his method which appeal to me when the operation is done for malignant lesions but which, of course, do not apply to the lesions under consideration. It is a principle as broad as surgery itself that in all malignant lesions, no matter in what part of the body they occur, extensive ablation of tissue is a *sin qua non*. That it is impossible to cut wide of the mark while "hugging" the uterus, as must be done if the organ is simply enucleated from its cellular bed, goes without saying. While, then, the Pratt operation may be applicable to non-malignant lesions, it seems to me that it is entirely inapplicable to malignant lesions. The ultimate test of all surgical procedures must be the results obtained, and I surmise that when the statistics of vaginal hysterectomy two years hence are written it will be found that the advantages in carcinoma uteri will be largely on the side of the older operation.

As regards the ligature: In the first vaginal hysterectomy done by me on March 7, 1887, I followed the method of Shroeder, and tied the broad-ligaments en masse with heavy silk ligature. The difficulties in securing the entire ligament in one ligature are very great, and there is great danger also of the ligature slipping after it is once secured. When this method was in vogue there were many more cases of secondary hemorrhage reported than at the present time. Later on the ligaments were secured in section and the results were much better. The objection, however, to the silk ligature is that it does not come away for a long time, and often never comes away, remaining as a source of irritation in the upper part of the vagina and perpetuating the discharge. To obviate this objection catgut was substituted, but it is necessary to have the catgut especially prepared for the purpose. Ordinary carbolized catgut will absorb too quickly, and I had one case of secondary hemorrhage following its use. Messrs. Johnson & Johnson have

prepared for me, through Parson & Son, of this city, a ten days' chromicized catgut (No. 2) which answers the purpose admirably. I am now using this ligature in all of my plastic work in and about the vagina, and have every reason to feel satisfied with it. For the last six months, with one exception, I have used this ligature in all of my trachelorrhaphies and perineorrhaphies, and have not had a single failure. I mention this fact to show you that it is entirely safe to use it for securing the broad-ligaments in vaginal hysterectomy. There is one little point in tying the chromacized gut which must be observed or the knot will slip. The single knot in the first hitch should always be used or the ligature will kink.

I first open the anterior and posterior cul-de-sacs in the usual way, using for the purpose Emmet's cervical scissors. If there is plenty of room to do so the peritoneum is next stitched to the vaginal mucous membrane, both in front and behind. This will control the oozing which always results from the separation of the mucous membrane from the cervix. Unfortunately, when the uterus is large or the pelvis very small, this cannot always be done at this stage of the operation, and it is better to postpone this step than to spend too much time in its accomplishment. Nor is it always practicable to stitch the mucous and serous membranes together at any stage of the operation, if the uterus is completely imbedded in inflammatory exudates. Next, by means of the needle which I show you, which is a modification of the needle used by Leopold, a catgut ligature is carried into the base of one of the broad-ligaments deep enough to secure the uterine artery of the corresponding side. This is securely tied, the end caught in catch forceps and carried above the pubes out of the way. With the uterus firmly dragged down by means of a strong guy suture previously introduced into the cervix, as much of the ligament as is included in the ligature is cut with scissors. The opposite ligament is dealt with in the same way, when the uterus will descend somewhat. The entire ligament of either side is tied and cut off in this manner, usually four on each side being sufficient. The first two ligatures must be passed pretty close to the cervix for the purpose of avoiding the ureters. I do not mean by this that they should "hug" the cervix, for in operating for cancer they should

be at least a quarter of an inch from it. The upper ligatures should all be passed as close to the pelvic wall as possible, and many times the appendages can be removed attached to the uterus. In the inflammatory diseases, however, this is not usually possible, and the appendages will have to be removed at a subsequent step of the operation. If pus pockets are opened into as the operation progresses, the pus should be washed away with the douche and should not be permitted to come in contact with the intestines. Should the intestines get in the way after the peritoneal cavity is opened, they should be kept back by means of a medium sized sponge, to which is attached a strong string. After the uterus is removed the appendages, if not removed with it, should be separated, ligatured, and cut off, if it is possible so to do, providing, of course, they are diseased, as they always are if the operation is done for the liberation of pus. A little practice will enable the operator to remove the appendages in nearly all instances, though not in all. In extremely bad cases, where the entire contents of the pelvis are matted together, their removal may be not only impossible, but it is sometimes unwise to attempt it. After the uterus is removed in these cases it is better to break down the septa dividing the several purulent accumulations, wash the cavities with a bichloride solution, and pack the wound with iodoform gauze. By doing this the peritoneal cavity is not opened into, the shock is reduced to a minimum, and the results are most satisfactory. It is true that the patient will never entirely recover her health, but she will be quite as well as she would have been had the operation been done from above, and the risk is infinitely less. It will at least place her in a condition so that if a subsequent operation from above becomes necessary she will be in much better shape to stand it.

As a final step, in cases where it can be done, the peritoneum is stitched to the vaginal mucous membrane with a running catgut suture, the stumps of the broad ligaments being drawn down by means of the ligatures attached to them and stitched into the wound. After the wound is completely encircled in this way the anterior and posterior vaginal walls are brought together at the median line, when the ligature is tied. This will leave a small opening on either side of the median line through which I pass a

strip of iodoform gauze for the purpose of insuring perfect drainage. All catgut ligatures are now cut short, and the vagina is packed with iodoform gauze, external dressings applied, and the patient placed in bed.

Should it be impossible to bring the peritoneum down in the manner described, there will remain a good deal of oozing from the wound which will have to be controlled. I think it best in these cases to wash the pelvis out with hot sterilized water, which will, in a measure, control the bleeding. After the oozing surfaces are as thoroughly dried as possible with sponges, the edges of the wound should be caught on either side with catch forceps, and by means of a long dressing forceps, a double layer of iodoform gauze, to the center of which is attached a strong string, is carried into the pelvic cavity, pushing the intestines before it. Into this bag is packed long strips of gauze, so that when the string is pulled upon it will plug the wound from above exactly as the posterior nares may be plugged by means of a Bellocq's canula. This is a little point which I am sure will be appreciated by all who try it.

In cases operated upon in this way the shock is usually slight and the convalescence uninterrupted. My experience in pus cases, for which hysterectomy has been performed, is limited to thirteen, but with the exception of Case 8 all have recovered nicely. This case will doubtless require a second operation for the closure of the fistula, but I feel confident that the fistula would have closed spontaneously had her system not been poisoned for years with opium.

I have made for all purposes fifty-three vaginal hysterectomies, with three deaths. Two of the fatalities resulted from secondary hemorrhage, and one from obstruction of the bowel. In one of the cases dying from hemorrhage the ligaments were tied en masse. The second case is the one already alluded to where the Pratt method was attempted. In the case of intestinal obstruction the forceps were used. This case is recorded in my text-book, and I feel confident that had the ligature been used instead the results would have been different.

I select the following cases as illustrative, for the reason that they are somewhat typical, and for the reason also that they show the various methods of operating both from above and below.

While my experience leads me to believe that the lower route is the preferable one in the vast majority of pus cases, I do not propose to be restricted to this route when another seems the preferable one; nor do I intend to confine myself to one technique. Cases are bound to present themselves where a combination of methods is necessary in operating from above. When I find that the pus is confined to one or the other broad ligament, I do not hesitate to close the abdomen and finish the operation from below; nor should I hesitate to discontinue the operation from below and finish it from above were it necessary. However, the specimen which I show you (Case 5) shows what can be done from below. I cannot imagine a more difficult operation than was this one, yet I succeeded in clearing the pelvis perfectly. I could have removed the appendages much more easily from above, but the woman would have had left behind a uterus which contains, as you see, a small fibroid. I believe that her chances for recovery are infinitely better than would have been the case had I not removed the uterus, and certainly the dangers attending the operation were infinitely less than if it had not been done from above.

ILLUSTRATIVE CASES.

CASE No. 1.—Patient, age thirty-four; married and two children, the eldest being fifteen and the youngest eight. No miscarriages. Menstruation from the beginning occurred every three weeks, and was always attended with a great deal of pain which confined her to the bed for one or two days of each period. The flow continued for six days, and always gave rise to an intense headache. A few months after the birth of the first child she was taken with a very severe pain in the left side, which extended to the stomach and back. From that time on any unusual exercise, as a long walk or lifting, would bring on this pain. Has never been able to do even light work without producing a burning, sickening pain in the left side and back. In 1890 she began to have a discharge of pus from the rectum, which varied in quantity from one-half to one ounce in the twenty-four hours. This discharge continued for four years, and was attended with so much pain that opiates were necessary in order to control it. She was never free from pain unless under the influence of opiates.

In June, 1894, I was called by Dr. R. Hathaway, of Wellington, to make an examination. The foregoing history was elicited. The

pus which passed the bowels was of the most offensive character. Upon examination I found that the appendages were apparently buried in inflammatory exudates, and that there was a mass of some kind corresponding to the left broad-ligament. It was only necessary to look at the patient to see that she was a great sufferer.

A week from the time I first saw her I had her at the Huron street Hospital, and opened the abdomen from above. The appendages were dug from the exudates with comparatively little trouble, but I discovered that there was an accumulation of fluid in the folds of the left broad-ligament. I, therefore, closed the abdominal wound, placed the patient in the lithotomy posture at the foot of the table, and without introducing a speculum thrust a sharp-pointed scissors, guided by the finger, into the abscess through the lateral fornix. The scissors were then expanded and withdrawn, thus liberating the pus. The pus cavity was now washed with a bichloride solution and packed with gauze, as was also the vagina. It was washed out daily and repacked. Convalescence was uninterrupted, and in less than three weeks' time the opium was discontinued. The patient weighed before the operation one hundred and twenty pounds. Now she weighs one hundred and seventy-two, and a more grateful woman never lived.

CASE No. 2.—Patient, age thirty-four; referred to me by Dr. G. W. Arbuckle of this city. One child, a young lady. Eighteen years ago was kicked in the abdomen which gave rise to extensive and serious pelvic inflammation. Following the attack of inflammation there was a discharge of pus from the rectum which occurred periodically until the last operation was performed. I was called to see her in September of last year. Though not emaciated, as was Case 1, the skin showed very clearly that the system was contaminated by the absorption of pus. I found on examination that there was a mass on the left side of the pelvis which extended as high as the umbilicus, and that all of the pelvic contents were matted together. One year previously a well known and skillful surgeon of the city opened the abdomen, but found so many adhesions that he closed it again without attempting to do any thing. A ventral hernia resulted from this operation. She was much worse following this exploration, and appealed to me to do something for her. Menstruation had been very profuse during her entire illness. I opened the abdomen in September of this year in the presence of the class

at the Cleveland Medical College. A knuckle of intestine was found adhered to the old abdominal scar, which was dissected off with some difficulty. The pelvic contents were indistinguishable, the one from the other. No trace of either ovary or tube could be found. The large mass which could be felt from above on the right side, and which evidently contained fluid of some kind, was as large as a fetal head, but was so firmly fixed to the pelvic roof that it could not be attached to the abdominal wound. I accordingly separated its upper peritoneal covering in such a way that I could draw it upward and attach it to the lower angle of the wound. Before doing this, however, a quart of most offensive pus was drawn off with an aspirator. Next, by means of quilted sutures, the abscess walls were carefully stitched to the abdominal opening, though an incision into the abscess was not made at this time. Dressings were applied and the patient placed in bed. Three days later, after the adhesions of the abscess wall to the abdominal were secure, so that no puss could find its way into the peritoneal cavity, the patient was again etherized, and the opening made. The pus cavity was thoroughly washed and packed with iodoform gauze. More or less gas and fecal matter escaped from the opening for several days after it was made. The wound was washed and packed daily, and in five weeks' time was completely healed. On January 22, 1893, she wrote me: "The operation is a success, and I am better in health than for many years," which is literally true, though she is not as well as I wish she were. There has been no more pus from the rectum and the symptoms of pyemia have entirely vanished, but there is yet a good deal of pain and the menorrhagia continues. Were I to operate on this case again, I think that I should attempt it from below, for had the uterus been removed, it would of course put a stop to all further trouble with the menstrual discharge. In cases attended by excessive hemorrhage this is a point well worthy of consideration.

CASE NO. 3.—Patient, age twenty-four; married for two weeks, when her husband deserted her, leaving her with violent pelvic inflammation, the result of gonorrhea. Prof. P. A. Cole, whose patient she was, brought her to the Huron Street Hospital in January of this year, and placed her under my care. At the time of entering the hospital the temperature ranged from 100° to 104° F., and the pulse from 110° to 150°. The prostration was very great. Dullness extended above the umbilicus on either side, and the entire pelvis was literally packed with exudates. Pain was only partially controlled by the free use of opiates. I felt sure that an attempt to reach the appendages from above would prove fatal at that time, so an exploration was made with the aspirator from be-

low. At least three pints of serum was drawn off through the aspirator, which was thrust into the cul-de-sac of Douglas. A director was passed alongside of the aspirating needle, which served as a guide for a long, sharp, pointed scissors, which were expanded and withdrawn. After the cavity was washed out it was packed with iodoform gauze. This preliminary operation afforded much relief, and the patient rallied sufficiently in four weeks so that it seemed best to remove the uterus, and afford complete drainage. This was done three weeks ago. The uterus was absolutely dug from the surrounding exudates, the pus tubes opened into but not removed. The peritoneal cavity was not opened nor were the intestines seen during any part of the operation. It would have been utterly impossible to remove the appendages, for an attempt to do so would surely have ruptured the bowel. Then, too, the prostrated condition of the patient forbade taking undue chances. The resulting excavation was cleaned with iodoform gauze. Today she is infinitely better, and is beginning to walk. I am sure that she would have died had either the uterus or the appendages been removed when she first came to me. By first relieving the system by drawing off the fluid from the Douglas cul-de-sac, she rallied sufficiently to justify the more radical procedure. However, I do not believe that she could have lived through a celiotomy at the time the uterus was removed. As it is her life will be spared, and I think that in due time she will regain a fair degree of health. I say a "fair" degree of health for the reason that I do not believe that any woman who has once had her pelvic and abdominal contents matted together can ever be quite the same that she was before the inflammatory attack which was responsible for the exudates.

CASE No. 4.—Patient, age forty-six; referred to me by Prof. W. H. Baxter. Four children, the youngest being sixteen. For years she has had more or less pain in the pelvic region, with nausea and vomiting. Profuse attacks of hemorrhage from time to time, so that she is anemic and very much emaciated. An offensive leucorrhea during the intervals between the hemorrhages. Upon examination the uterus was found retroverted, greatly enlarged, exquisitely tender, and firmly attached to the rectum. For six months before I saw her she had been compelled to subsist almost entirely on liquid food because of the condition of the stomach. She was brought to the Huron Street Hospital, and I removed the uterus and appendages on March 15th of this year. The right tube was distended with pus and the right ovary was bound down between the fundus and the rectum. The fundus was separated from the rectum with some difficulty, but finally both appendages were

removed with the organ. The wound was closed in the usual way, and the patient placed in bed. Notwithstanding her extremely prostrated condition the shock was practically nil, and the convalescence was uninterrupted. She returned to her home three weeks from the day of the operation, and on my first visit to her I found her eating with relish fried oysters, cottage cheese, fried potatoes, pickles, and coffee. The stomach trouble was purely reflex, and had almost entirely disappeared.

CASE No. 5.—This case was operated upon only Friday of last week, and I have the uterus here to show you. The patient belongs to Dr. Wm. H. Gifford, of Cleveland, who has kindly furnished me with the following history: She is thirty-eight years of age, married, and has never been pregnant; has always been irregular, sometimes missing three or four successive periods. To make a long story short, she was exceedingly anxious to become pregnant, and gave her imagination full sway. In due time enlargement of the breasts and tympanitic distension of the abdomen came—in short all of the symptoms of pseudocyesis. The baby's wardrobe was prepared and the nurse engaged, but no baby came. She finally consulted Dr. Gifford, who made an examination and informed her that she was not pregnant, and in all probability, never would be. There was a sharp hemorrhage from the uterus in December of last year and March of this, which was so unlike her usual periods that she did not think they were menstrual in character. She has suffered intense and gradually increasing pain in the pelvis for the last two years. There was more or less fever with the exacerbations of pain, though there is no history of severe pelvic inflammation. I suspect that the inflammation is of gonorrhreal origin, though I have not examined the discharges for gonococci. She entered the Huron Street Hospital on May 8, and I operated on the following day. A more difficult operation could not well be imagined. The patient is large and fleshy, the vagina naturally small, while the pelvis is deep. An effort to drag the uterus down after the anaesthetic had been given showed that the organ was perfectly unyielding. Pus pockets on either side were opened into as the dissection progressed, and at least a teacupful of pus was liberated. I finally delivered the uterus in the mutilated condition which you here see. In its interior is a small fibroid the size of a small apple. The appendages of both sides were then separated from their surrounding attachments, tied, and cut off. The peritoneal cavity was opened into and the intestines exposed. After the parts were removed the pelvis was washed with sterilized water, and, as the oozing was persistent, the wound was dressed open and packed in the manner described. The operation lasted

for over an hour, but the shock was not at all bad. She is convalescing nicely with every prospect of a perfect cure.

CASE No. 6.—I am indebted to Dr. R. Hathaway for this patient also. It is one of sarcoma uteri complicated with pyosalpinx. The patient is age forty-two, and has flowed inordinately for the last four years. The discharge during the intermenstrual period was watery, offensive and contained "pieces of flesh." She has had four children, the youngest being six years of age. Notwithstanding the fact that she has been under treatment more or less of the time for the four years she has been flowing, the two medical gentleman under whose care she was, did not see fit to make an examination. Dr. Hataway saw her for the first time on April 20, and at once discovered that there was something seriously wrong. Indeed he made the diagnosis for me and two days later called me to see her. The uterus was found much enlarged and retroverted so that the cervix was crowded under the pubes in front. The fundus was exquisitely sensitive. The general condition was in every way bad—the complexion straw-colored, emaciation marked, and the pulse 120. Inasmuch as an operation promised the only hope of relief, it was decided to bring her to the city and make the attempt. This was done three days later and a vaginal hysterectomy was made on April 27. The broad-ligaments were tied and cut in section with but little difficulty. The left tube contained pus and was removed with the corresponding ovary. The wound was closed in the usual way, and the patient returned to her bed. The shock was not great, and to-day, two weeks from the time of the operation, she is taking her meals sitting up in bed.

The uterus in this case was eight inches in length, and contained a sarcomatous tumor the size of an orange, which was attached to the posterior wall of the fundus.

CASE No. 7.—This is also a recent case and I report it because I have the specimen here to show you, which is a beautiful one. The tubes were not distended with pus, though the ovaries were dug from inflammatory exudates. The patient is thirty years of age, is married, and has had one child. She was brought to me by Dr. Kate Parsons, of Cleveland. She has had menorrhagia and metrorrhagia for years and has become almost exsanguinated. She is a little frail creature, and weighs seventy-five pounds. The discharge was typical of sarcoma, being watery and containing the "brain-like" masses which are put down in the text-books as pathognomonic of this form of malignancy. The uterus was removed in the usual way and the appendages dug from their inflammatory bed. There was much oozing, which was controlled by gauze packing. Both ovaries were cystically degenerated and she has long

had pretty much the same condition of the stomach described in Case 4. The shock was somewhat profound, but she rallied nicely, and thus far her convalescence has been uninterrupted. You will see that the uterus contains a tumor the size of a small orange, which is a fibroid of the submucous variety. Had the ovaries been removed from above in this case, I fear that the hemorrhage from the uterus would have persisted for an indefinite length of time. I should have added that the uterus was retroverted, attached to the rectum, and that a curetting had been done one year ago without benefit.

CASE No. 8.—Patient referred to me by Dr. W. H. Stedman, of Cleveland. She is forty-six years of age, and has passed pus through the bowel for the last twenty-one years. Her illness dates from childbirth, at which time she undoubtedly had septic inflammation of the uterus and the pelvic organs. Her suffering has been something almost indescribable, and she has reached a point where she is taking four ounces of laudanum a day in order to relieve the pain. When I first examined her an indistinct mass could be felt on the left side, which undoubtedly communicated with the rectum. Early in September of 1894, I opened the abdomen from above, dug the appendages from inflammatory exudates, opened the abscess, and drained it through the abdominal wound. In the course of three weeks the cavity had entirely filled in from the bottom, and she was permitted to leave the hospital, though against my advice. There was no discharge of pus through the rectum for some four or five weeks after her return home, but at the end of that time she overdid in some way, and soon was as bad as ever. She returned to the clinic in February, and I removed the uterus per vaginum. Of course in doing this the abscess cavity was opened into, as the uterus was a part of the abscess wall. The opening in the rectum now communicated with the vagina, and from the very first fecal matter escaped through the vagina. This has shown no disposition to heal, and I shall have to perform another operation in order to close it. Twice before I have been so unfortunate as to get into the rectum in making vaginal hysterectomies, but in each instance the fistula has closed spontaneously. Undoubtedly the poisoned condition of the patient's system has had much to do with perpetuating the discharge. I should have added that forceps, instead of the catgut, were used to secure the broad-ligaments, and that the bleeding was very profuse.

THE SURGICAL TREATMENT OF UTERINE FIBROIDS.

BY DE WITT G. WILCOX, M. D., BUFFALO, N. Y.

The fact that so much has appeared within the last few months relative to the etiology and treatment of uterine fibroids, is conclusive evidence that a determined warfare is being waged against these offensive neoplasms. In glancing over the magazines that come to my study table, I am reminded of the thought and research given these tumors when I observe, for instance, that the *Journal of Obstetrics* for May has no less than ten articles treating on uterine fibroids. The May number of the *Gynecological and Obstetrical Journal* contributes five, the previous month it contained two. The *New York Medical Record*, the *New York Medical Journal*, and the majority of our own periodicals make extensive contributions upon this subject. It is interesting to note the various and varying methods that have been advocated for the treatment of fibromata since our illustrious countryman, Ephraim McDowell, in 1809 first demonstrated successfully the possibility of removing an ovarian cyst. A few successful ovariotomies induced the more daring operators to attempt the removal of fibroids, but with such disastrous results that the procedure was abandoned. Then supervened the reactionary period, in which the mention of a fibroid tumor brought dismay to both surgeon and patient. Up to ten years ago but little progress had been made, surgically, in the management of these growths. In the last two or three years, however, the operative technique has been so advanced that but few fibroid tumors of the uterus can be regarded as surgically inaccessible.

In the outset we must confront a question that persistently obtrudes itself, namely, "are uterine fibroids on the increase?" The theory of Gottschalk, that the occurrence of these growths is favored by every form of local irritation which tends to produce circulatory disturbance, might induce us to answer this question in the affirmative. Certain it is that the responsibility of the obstetrician is not decreased if this theory be true; for at the puerperium the opportunities for circulatory disturbance in the uterus are so inviting that it requires an argus-eyed guardian to keep the organ

normal. Septic inflammation, retained membranes, tardy involution and lacerations, are potent factors in the production of these circulatory disturbances. There is a surgical axiom which says: "Every pathological growth that is surgically accessible should be removed." This pertains no less to the uterus than elsewhere. While I am not ready to advocate that every uterine fibroid requires surgical extirpation, yet with the newer and safer methods now in vogue there need be but an exceedingly small majority left. The two classes which may, and must remain outside the pale of surgical domain are, first, the inoffensive small tumors that have remained inert for a period of years, and have never given rise to a pathological impression. These I say may (yet need not necessarily) be left untouched. The second class are those inflammatory ones, which, like the anarchists in society, excite inflammation in themselves, and extend it to all surrounding structures, till the entire abdominal contents are a mass of tangled structures, of no use in themselves, and an abomination and a curse to the body politic. These are surgically inaccessible from the fact that it becomes a physical impossibility to untangle and disengage adhesions, which have become so firm that they amount to an incorporation of one structure with another. Having excluded these two classes I do not hesitate to make the sweeping assertion that all other fibroids should be extirpated by one method or another, according to their location, relation, and size.

Before proceeding with the method of dealing with these neoplasms, I must speak of a tumor, which, while not belonging to any special class, yet enjoys the distinction of coming into prominence only at such eventful periods in the patient's life as that of pregnancy. The fibroid tumor, complicated with pregnancy, deserves a distinct consideration. There are few practitioners of any experience but to whom have been presented one or more cases where as pregnancy advanced a small or large irregular nodule could be felt in the walls of the uterus; or it may be that such was not noticed till after the puerperium. Then as the uterus again contracted to its normal size he found a hard lump here or there, in the organ, or, perhaps, the entire uterus was so large and hard that he suspected another foetus still in the uterus. We must first

answer the question: Should a woman, possessed of an uterine fibroid, be advised against child-bearing? Dr. B. F. Baer, in a discussion before the Philadelphia Obstetrical Society at its last meeting, said:

"I express the view that a woman who is known to have a fibroid tumor ought to be advised of the danger attending pregnancy and parturition, and that if she desires protection it is the duty of the physician to furnish such protection, even to the removal of the tumor. If, however, she wished to take the risk for the sake of desired offspring, she had the right, of course."

This view, however, while very safe and comfortable to the physician, savors a little of cowardice, in that it places *all* the responsibility upon the woman, who is not sufficiently informed to judge of the risk she takes.

In order that I might answer this question intelligently, I have collected from a widely extended source a report of as many cases as could be found which bore directly upon the subject. I have gone over the proceedings of all the important societies for the last year, the reports from leading journals, and the more recent text-books, together with personal conversation with many operators of note, the consensus of opinion, which also coincides with my own experience, is this:

1. Pregnancy so seldom occurs in conjunction with exceedingly large fibroids that the physician may never have to answer the question: Is it dangerous for a woman with a *large* fibroid to become pregnant?

2. If there be a small fibroid, say not larger than a pomegranate, which has never caused any disturbance whatsoever, the chances are decidedly favorable to a successful termination of labor. Moreover, while it has been a theoretical fact that gestation tends to produce an increase in the size of fibroids, yet an actual tabulation of cases not only does not bear out that fact, but shows the majority of them decrease after the puerperium. I have seen quite a number of cases wherein I have held myself in readiness for a Cæsarean section or a Porro's operation, little expecting that the patient would succeed in a normal delivery, yet have been happily disappointed, and found later that the tumor was growing less.

3. If pregnancy should co-exist with an exceedingly large or troublesome fibroid, it has been found by the operators of wide experience that it is better to allow the gestative stage to progress to full term, if it will, rather than interrupt the process or attempt the removal of the tumor. When the full term is reached and labor has begun, then is the time to settle the question of operative measures. If nature cannot free the burdened uterus of its contents because of these obstructive growths, then art can come to her relief, either in the form of Porro's operation or Cæsarean section. It is surprising, and equally gratifying, to find the number of cases reported, wherein the large size and unfavorable situation of a uterine fibroid, would seem to preclude the possibility of delivery *per vias naturales* which, nevertheless, have resulted favorable to both mother and child, without operation.

Dr. Fullerton, of the Woman's Hospital of Philadelphia, reports this year four cases of this nature, which were regarded so serious that all were sent to the hospital with the expectation that nothing short of surgery could deliver the uterine contents, yet all came through safely without such aid. One case, a farmer's wife, was delivered of her third child, having carried a fibroid from her first confinement, and having come to the hospital each time with the expectation of undergoing an hysterectomy. Dr. J. M. Baldy says:

"I think the difficulty of delivery under these circumstances has been greatly exaggerated. In a number of instances the preparations have been made for Cæsarean sections, but the women have delivered themselves while we were getting ready."

Dr. Rosebury, of the New York Polyclinic, reports three very interesting cases of this nature, in all of which operative measures seemed the only chance of delivery, yet such was not necessary.

Dr. Leopold, of Dresden, Germany, upon an invitation from one of our American societies, wrote upon this subject a few weeks ago, bringing some very valuable information from a statistical point of view. I must quote one sentence in his letter where he says: "The extirpation of such a tumor during pregnancy produces vast changes, and it is surprising that these necessary injuries do not interrupt pregnancy in every case."

Here are a few interesting records that Leopold has brought out: Lafour, he says, found that of one hundred pregnancies com-

plicated by myomata or fibroids of the corpus uteri, fifty-one were head presentations, while thirty-two and a half were breech, and sixteen and a half transverse presentations. Winckel states that 23.5 per cent.—*i. e.* eight times—more pelvic presentations are to be found than normal, and transverse positions, 16.5 per cent., or thirty-five times, more frequent than usual. Furthermore, prolapse of small parts occur in 4.7 per cent., and the umbilical cord prolapses in 6.8 per cent. of the cases. Lafour also points to the unusual frequency of placenta *prævia* in fibroids of pregnancy. Another operator of note in N. Y. says:

“I consider the operation of myomectomy during pregnancy entirely unjustifiable, and, with but few exceptions, these cases should be left alone until the labor has commenced. If it is then found that delivery is impossible, then, and only then, has the time arrived to interfere and perform the section Cæsarea or the Porro operation. Both of these operations give far better results than myomectomy during pregnancy, especially if timely preparations have been made.”

Under the subject of “Myomata Complicating Pregnancy,” Dr. Jesset read a paper at a meeting of the British Gynecological Society, on October 11, 1894, and reports two cases which came under his observation. Based upon the experience of these two cases, the author formulates the following rules for one’s guidance in the treatment of fibroid tumor of the pregnant uterus, although I grant that one should not lay down any hard and fast rules based upon an experience of two cases.

1. “That in cases of subperitoneal myomata, pedunculated or situated in the corpus uteri, if growing rapidly or of large size, one is justified in opening the abdomen and enucleating the growth.”
2. “When there are a large number of subperitoneal and interstitial myomata of considerable size studded over the uterus, which are found to be increasing in size, the whole organ with its tumor should be removed.”
3. “In cases of interstitial or submucus myomata complicated with pregnancy, statistics seem to show that the risk to the patient is greater if left to go to full term than if abortion is induced or the whole organ removed.”
4. “Cases in which the tumor is located in the cervix may be

allowed to go to full term, or the growth, if presenting in the vagina, may be either enucleated or removed morcellement at the end of pregnancy."

The discussion upon Dr. Jesset's paper is exceedingly interesting and instructive, and a brief abstract of the same is certainly allowable.

Dr. Routh at this above discussion related a case of a woman who, when six months pregnant, was admitted to the hospital. A fibroid about the size of a foetal head occupied the lower portion of the uterus, and delivery *per vias naturales* appeared impossible. It was decided to let the woman go to term and then perform Cæsarean section. But one fine day the tumor rose out of the pelvis, the head descended, and a living child was delivered without difficulty.

Dr. Bantock was of the opinion that text-books would bear a considerable amount of revision. He had seen a large number of cases of pregnancy associated with uterine fibroids, single and multiple, and had not seen any of the accidents usually ascribed to this condition. The presence of one or more fibroids seemed to have little or no influence in preventing conception, and his experience went to show that hemorrhage or placenta prævia was not abnormally common. A tumor involving the lower segment of the uterus may obstruct delivery. But it is remarkable how nature even provides for these cases. He then quoted a case in which his opinion was requested as to the advisability of surgical interference in a large fibroid occupying the left side of the pregnant uterus. He advised noninterference, in the belief, founded upon experience, that as pregnancy advanced, the tumor would rise out of the pelvis and allow the passage of the child: that was just what happened. He was present at the delivery, and the labor proceeded perfectly normally. He examined the woman post partum, and had he not known she had a fibroid, he would have believed the uterus to be normal. Nor does he think that women with fibroid tumors are more liable to have an abortion, with the exceptions of those rare cases in which the uterine cavity is surrounded by many fibroids. Yet, even in the latter cases, he advised against the induction of abortion, for it was safer for the patient to leave this operation to nature.

Dr. Armstrong mentioned the case of a lady, seen four years ago, who had a large fibroid. She became pregnant, and was strongly pressed to have an abortion induced, but declined. She had an easy labor and an excellent recovery. He examined the

woman lately, and found that every trace of the tumor had disappeared.

Quoting from Pean, of Paris, under the head of " Fibroma of the Uterus and Total Extirpation " (Ann. de Gyn. et d'Obst.):

In case of small tumors of the uterus, not exceeding in size the head of the foetus at the end of pregnancy, the author always performs the operation through the vagina, with or without preservation of the uterus, according to circumstances. But where large fibroids or fibro-cystic interstitial tumors of the body require removal, he employs the combined method devised by him; separation of the tumor above the cervix from the abdomen, removal of the remaining stump piecemeal through the vagina.

In dismissing the subject of fibroids complicating pregnancy, I would say that only rarely is it necessary to interrupt gestation, and equally rarely is it necessary or wise to perform myomectomy. That when labor has begun, and a reasonable effort on the part of the uterus to expel the foetus has resulted in failure, then a hysterectomy after Porro's method is the most desirable operation. A Cæsarean section may be proper where through mal-position of the child natural delivery could not be affected, but which at another time might be done successfully. But it is my opinion that if a woman has braved it through for nine months, with a picture constantly before her of a serious operation to bring her an offspring, and then the reality of finally undergoing the ordeal, she has done her duty to the State and to her kind, and should be forever exempt from the further possibility of bearing children, this exemption could be most effectually accomplished by an hysterectomy.

We shall now come to the consideration of fibroids in general not complicated with pregnancy. I made the statement early in my paper, that with the exceptions of two classes all uterine fibroids were surgically accessible, and should be removed. This position I take by reason of the safe methods now adopted for extirpation, and the more recently discovered tendencies which these growths show toward degenerative changes.

The rule as laid down by Baldy, and which is quite generally accepted, seems sensible and humane:

1. All rapidly growing fibroid tumors in young women before thirty-five years of age should be removed, and many of the same kind as late as forty years of age.
2. All cases in women under forty years, where there is such loss of blood as to enfeeble the general health, and which is not readily controlled by treatment.
3. Cases which have gone several years past the menopause, with excessive, uncontrollable bleeding or recurrent attacks of peritonitis.

Just a few words regarding the technique of operation and I am done. Up to one year ago my method in all cases where the tumor was so large as to require removal per abdominal incision, was by amputation of the uterus and tumor at or near the internal os, and securing the stump extra peritoneal. This has proven very satisfactory in its results, as I had but two deaths out of fourteen operations; neither has there appeared a hernia in any of the cases, and in but one was there a fistula. Still there are objections to the operation in the fact that some of the uterine tissue is left behind, there is an unwieldy stump to deal with. The bladder may be compressed, and there is the possibility of a fistula by the way of the cervical canal. The perfection which has been reached in the performance of vaginal hysterectomy, simplifies greatly the question of removing the smaller troublesome fibroids. We can now say that practically there is no danger in that operation. The ideal method for abdominal extirpation now is that of total hysterectomy done entirely through the abdomen or by both vaginal and abdominal incisions. A glance at this chart will bring before you the manner of blood supply to the uterus, the ovarian artery, to the uterine artery, and the anastomosis of the two. There is but little difficulty in checking blood flow through the ovarian artery, as a ligature placed as you see it here will be effective. Instead, however, of taking the time to apply two ligatures, one proximal and one distal, I tie a distal ligature, and then slip a long pair of forceps on the proximal side and cut between them, ligature and forceps, another ligature can be applied to the broad ligament between the ovarian and uterine artery if desired, but there is so little blood supply that but little hemorrhage need be feared. You now have

the large tumor sufficiently freed to be lifted well out of its cavity, and bring into easy reach that portion of the broad ligament which contains the uterine artery. The pulsations can usually be felt, and with a transfixion needle, armed with No. 8 or 10 braided silk, a double ligature can be passed and tied so as to cut between the two. The bladder should be dissected loose from the uterus, and this is quickly done by peeling off the uterine peritoneum, leaving it attached to the bladder. You can now fearlessly make a girdling incision around the entire uterus just below the last set of sutures which controls the uterus arteries, and pull out the cervix. There are different methods of proceeding at this point, which can be determined upon according to circumstances. The use of a crutch in the vagina, which can be pushed upwards by an assistant, makes a safe and sure guide which can be cut down upon, both in the anterior and posterior cut-de-doc. Having removed the entire uterus, the next step is to sew up the vaginal rent by a continuous suture after first turning in the stump and sutures of the broad-ligaments.

The only criticism yet offered to this method of total hysterectomy is that it weakens the vagina vault, and subjects the patient to a possible vaginal hernia. So far as I have been able to discover that criticism is purely theoretical, as I do not find a recorded case of such sequence really occurring.

DISCUSSION.

DR. RUSSELL—I have listened with a good deal of interest to the article that the doctor so ably presented to this convention. The removal of these pathological growths doesn't belong to the old school so much as they observe at times. I don't believe they have perfected the process of removal any more than the members of your own school have done. I have removed several uterine fibroids by the Kittening method. My method has been to girdle the uterine cervix for the first part of the operation, seizing the cervix with the vulsellæ, introducing the guy rope, pulling down as far as possible, and by a system of girdling. I girdle up as far as the uterine artery, if I cannot do that I simply dissect loose the utero-vesical tissue upon the abdomen, commencing at the fundus

of the womb, dissect down on the same principle that we do a vaginal hysterectomy after the first intrusion into the peritoneal cavity by the vesico-utero method or through the Douglas cul-de-sac in which the womb is tipped over, and its section commenced. The same method is observed in these enucleations by commencing at the fundus and carrying off the ovarian artery with its many tortuous conditions into the broad ligament, and as you lift the tumor up into the abdominal wound, the girdling of the cervix is made. You then have no constricted mass with forceps or clamps unless the artery has been severed, and in that case you simply resort to the usual surgical expedients.

DR. WALTON—I came in just in time to hear the essayist say that there might be a vaginal hernia. There is one criticism which I wish to offer, and that is in tying that ovarian artery in the way represented, and in tying that uterine artery, I believe it is a faulty technique and I will tell you why. I have worked with a number of abdominal surgeons and have found it to be their experience, as well as mine, that where the fibroids were removed in this manner, they had peritonitis to contend with about the fourth day. I believe that the secret of that lies, or the cause of death is, in the ligating of the artery, as it is done in that method. We catch up too much tissue. If we would go to the trouble of dissecting out our artery as we would in other conditions, taking up both arteries we would not have this fatality. But by ligating in mass we encroach upon the sympathetic nerve, and that is the secret of this trouble. It sends word up to the abdominal brain, and that brain wreaks its vengeance on the heart, and it lies down on you about the third or fourth day.

DR. J. H. WILSON—I would like to ask Dr. Walton when he is taking this broad ligament off, in case he cuts the artery, does he take up the artery or tie it?

DR. WALTON—I stitch right around it with the needle. When your needle is there take another stitch and you have your bleeding controlled.

DR. WOOD—In connection with the subject of fibroid tumors and pus tubes, in a recent article, I think in the *American Obstetrical Journal*, Dr. Price, of Philadelphia, has made the statement, that pus tubes are in many cases responsible for fibroid tumors. It happens that in the last three weeks I have made a test of this statement in three vaginal operations where I found small fibroid tumors. In connection with the subject of fibroid tumors, I have referred in my book to a case I operated on that was opened by Dr. Schneider, where the tumor had grown from an imperceptible size in four months to an extraordinary size. She was operated on as

a last resort, and as is usual in such cases, she died from nervous prostration at Chicago.

PHYSIOLOGICAL DIETETICS IN THE TREATMENT OF DISEASES OF WOMEN.

BY H. D. BISHOP, M. D., CLEVELAND, O.

In choosing the subject of this paper I have been influenced by two considerations:

1. Because of the idea so general among physicians and patients alike, that individual peculiarities and inherited habits of the system are factors more important in the choosing of a dietary, than any theoretical rules based upon physiological or chemical ground. That a diet list should be constructed in an empirical way, and the utility of a food stuff estimated entirely upon individual experience.
2. In discussing the question from the standpoint of a gynecologist, I believe that I am calling notice to a matter that is given less attention by those who have to do with these cases than they properly deserve. In fact I am convinced that in no class of patients are idiosyncrasies of taste and appetite so indulged by the physician as in these.

Every gynecologist recognizes the importance of general constitutional measures and given explicit directions as to exercise, habits, etc., basing his advice upon the conditions treated, but in fixing the dietary of his patient, if any attention at all is paid to it, the chances are that it will be based upon routine practice, and be entirely empirical. It can be shown by scientific data, which bear out in every particular the clinical experiences, that all pathological conditions are influenced by diet, and in no place is this so true as in the cases coming under the gynecologist's care.

There are important crises in the life of women that in addition to proper hygienic precautions, the matter of diet can play an important part in securing and controlling a woman's health. Most important of all is the period of *youth*, from the ages of ten to twenty-one. It is not alone that this covers the age of puberty that

this distinction is made, but there is in addition great physical and mental development. It is the age of adaptation of the tissues of the body to the several functions for which they were intended.

"The osseous structures become more compact, firm, and capable of sustaining the muscular strain; the muscles increase in size and in capacity for overcoming resistance; the brain commences to respond to external influence; the inherent capabilities are aroused, and we have the birth of reason, intelligence, and originality."

The infant and child, in a comparatively short time, is transformed into a full-grown and developed, mature woman, capable of assuming the greater responsibilities of life. Infancy and girlhood are left behind, and the duties of maternity are before her. Just as it is important that the infant should be fed with scientific precision, so that it get the proper nourishment from the mother or from an artificial food, is it that the growing maiden should have the exact foods necessary to meet this wonderful transformation in the growth of the body and mind. Yet note from individual experience the entire lack of supervision of this important matter. At no time in life are the two whims of the individual so respected and indulged. With girls the matter is of more frequent occurrence than with boys, because from the nature of their habits they are more likely to be the subject of whims. As a result of the likes and dislikes formed in this impressionable age, habits of diet are formed which persist throughout life, and in so far as they are not in conformity with physiological laws, to the subsequent development of disease. Faulty assimilation can have but one result—imperfect performance of the body and imperfect development.

The change from girlhood to adult life and motherhood is such a complicated one, has such a profound effect upon the nervous system, and involves such a growth and development of new functions, that unless the proper kind and amount of nutriment is furnished, nature is stopped in her transformation, and the result is manifested by the condition of ænemia with consequent loss of nerve power. The breaking down of young, growing girls under the severe strain of mental development, coincident with their entrance into social duties, is too often forced upon us. A proper study of the

conditions of nutrition in these cases offers to the physician one of the most satisfactory lines of treatment for these cases. Next to youth the period of maternity is of importance. Here the necessities of the physical organism call for the highest grade of nutrition. No practice is so deleterious to the future health of both child and mother, as that which originates in the commonly accepted belief that the pregnant woman should live on a restricted diet, denying herself the nitrogenous foods. During the climacteric also, physiology shows us that the health of the patient is dependent largely upon proper diet. It is an age of disturbed functions, and unless there is harmonious action of the functions of the different organs of the body as they are influenced by nutrition, there develops in the organism the latent pathological conditions. Throughout the life of every person, and particularly woman, the condition of nutrition is the basis of exemption from pathological lesions or abnormal conditions of the functions of the body. How can the physician regulate these conditions of nutrition so as to prevent disease, and how can the pathological conditions which originate in malassimilation be recognized and corrected, will be the object of this paper, and be briefly explained.

For the present purpose it will be best to treat the subject in a general way, and not go into any special detail, except as to the composition of food-stuffs in general.

Modern physiological and chemical investigation has placed dietetics upon a thoroughly scientific and practical basis, and the quantitative composition of food-stuffs, the atomic constituency of their proximate principles, and their metabolism in the body are so thoroughly understood, that one can choose a food-stuff for a special result with almost absolute certainty.

In choosing food-stuffs from a chemico-physiological stand-point it is only necessary to recognize two general classes.

Class one includes all the hydrocarbons and carbohydrates. These consists chemically of the elements CO and H. The starches, sugars and fats of all foods belong to this class.

Class two includes all the albuminous or proteid class of foods. These consist chemically of the elements COHN and S. Such are

the nitrogenous parts of meats, milk, eggs and fish, as well as the vegetable albumins or proteids.

Whether in health or disease, the tissues of the body are continually breaking down, and energy and heat are being consumed. It is the function of a proper dietary to recognize these bodily expenditures and meet them, thereby sustaining an atomic equilibrium of the body constituents. An erroneous idea that often leads one astray is pertinent at this point. It is that the power of digestibility of a food-stuff establishes the propriety of its use as an article of diet. This of course is in part true, but many articles of food can be digested that under the circumstances of their ingestion could not be assimilated. It is the ability of the physical organism to *oxidize* a given food-stuff that determines its efficacy as an article of diet, and this much more than its digestibility.

Nature has provided an easy exit for undigested matter, but unoxidized matter, though it has a means of egress from the body, works serious harm to the system. It is yet a matter of conjecture to just what extent, the katabolins, produced from the imperfect oxidation of proteid matter, are responsible for the functional diseases of the body. The oxidizing power of the system is of course a limited one. At any given time there is only so much O dissolved in the blood plasma and in combination as oxy-haemoglobin.

When oxidized, class one, *i. e.*, the starches, sugars and fats produce heat, energy, lubrication and rotundity of form. This oxidation results in the formation and elimination from the body of H_2O and CO_2 . Oxidation of this class of substances takes place very easily, and to the exclusion of everything else. Class two when oxidized produce the same result as class one, *i. e.*, heat, energy, lubrication and rotundity of form, but in addition, the oxidation of the molecules of N and S give to the organism the elements of tissue construction, besides supplying the elements entering into the chemical formation of the important digestive fluids of the body. As class one are easily oxidized, so class two are slowly and with difficulty, oxidized. When fully oxidized the normal products of the oxidation of class two are HO, CO, urea, uric acid and kreatinine.

With the above facts in mind, *i. e.*, that O is the essential element in nutrition; that its supply is a limited one; that of the two classes of foods, the carbohydrates are oxidized most easily and hence first; and that the normal excrementitious matter of the proteids are H_2O , CO_2 , urea and uric acid in a fixed proportion we have sufficient comparative data to determine the state of the oxidation processes in the system.

When a meal has been taken which does not conform to the oxidizing capacity of the system, there will result an imperfect oxidation which in case of the proteid, will cause a variation in the relative proportion of urea and uric acid. Physiological experiments show that to barely sustain the functions of the body, the proportions of proteid to carbohydrate should be as 1:1. For active labor these proportions are 232:171. For forced labor, 242:289. The healthy organism is able to oxidize completely these proximate principles in these proportions and a diet based upon them cannot result in sub-oxidation.

In studying the average composition of the different food-stuffs we find that in order to secure the above proportions of proteid and carbohydrate we cannot use a vegetable diet. In order to get, for instance, the necessary amount of proteid from a green vegetable diet, it would be necessary to ingest it in bulk. The amount of carbohydrate in this amount would be so large that all the O available in the system would be utilized, and there would be an imperfect or no oxidation of the proteid. Many experiments have shown that the diet which most completely fulfills the requirements of the bodily expenditures is one composed largely of the albuminous foods.

Porter's animal diet consists of meat, milk, eggs and fish, with a small amount of readily oxidizable carbohydrate, fulfill all the indications of perfect nutrition. Variation from these requirements results in perverted functions and eventually diseased conditions.

The cravings of the growing child formed by an indulgence in starches and sugars, candies and sweetmeats, develop into a habit of diet in later years that consists of rich pastries and highly seasoned foods. With such feeding it is utterly impossible for the body to get anything like the nourishment necessary, and the sys-

tem being in a weak condition, it is the prey of any latent pathological process, and perverted functions.

In conclusion I wish to call special attention to a few thoughts mentioned in part before, as follows:

The sexual life of woman requires the most perfect nutrition to insure perfect action. Poor nutrition, poor functional activity.

Tissue waste in women is greater in proportion to physical exertion than in man, while as a feeder, woman does not indulge as frequently as man. In order to appreciate what a woman might be capable of, were she fed as man is, we have only to look at the nationalities in which the women do the manual labor. Here we find women eating the foods necessary to supply tissue waste, and they are just as capable of severe muscular exertion as men.

It is well to remember that imperfect tissue repair is manifested first through the nervous exhaustion of young girls and young mothers originates in the improper supply of nutritive matter for the repair of tissue waste consequent to the great metamorphosis in her physical and sexual life.

The mother who during gestation makes her diet conform strictly to chemico-physiological laws will ensure a healthy child, will have strength to have a tireless, and it is claimed, a less tedious labor.

Many of the diseases incident to the climacteric are, or can be prevented, or favorably influenced by securing good general nutrition. The morbid processes of the endometrium which are so likely to develop at this time will not do so if nutrition is right. Supply tissue waste and the morbid processes cease. I have known of three well authenticated cases of pronounced malignancy of the endometrium to be pronounced cured after pursuing a forced proteid diet.

In treating every woman, look first to the condition of nutrition. Examine the urine for evidences of suboxidation. Find out the character and amount of food eaten. Estimate the lung capacity to get the available O. Find out the amount of pure air your patient is getting. If you have a phthisic patient with a restricted lung capacity, you will know that she cannot oxidize as much food as she

ought. If you had a patient who is housed with little exercise, there is a smaller supply of O.

The diet must be chosen with all these data in mind and then after you have determined the amount of nutrition necessary to carry on the functions of the body, you can arrange your diet list.

CURETTING.

BY MARY DENNISON, M.D., TOLEDO, O.

In the last few years great changes have been made in gynecology as well as in surgery. At present, cases that used to be treated in the office for months are considered operative cases, and the results are far better than formerly.

We hear daily that young doctors, in fact all doctors are crazy, about operations, and certainly it sometimes seems as if each new patient who comes into a gynecologist's office means another operation. However, when we think with what faith patients formerly went for local treatment month after month, and how unsatisfactory the results were, we wonder how either physician or patient had the required perseverance.

Curetting is the operation, if one can call so slight a procedure an operation, which has brought about such a decided change in the gynecologist's work. Curetting is of untold value in obstructive dysmenorrhoea, chronic endometritis, puerperal endometritis, septic endometritis following abortions, and together with dilating and packing in chronic ovaritis and salpingitis.

When I have diagnosed a case of chronic endometritis my first, last, and only advice to the patient is, have your uterus thoroughly curetted, remain in bed for a week, and at the end of that time you will be in better health than you have been in for months. My mode of procedure is to prepare the patient carefully as to diet, condition of bowels, antiseptic condition of vagina and uterus. After she has been thoroughly anæsthetized, I scrub the external genitals with brush and sterilized water, and give a large, hot vaginal douche, washing the vagina thoroughly with absorbent cotton

on a pair of dressing forceps. I then dilate the uterine canal with a set of graded uterine dilators, and curette thoroughly and carefully until the canal feels perfectly smooth or I can get no more debris. After this I dry the canal with strips of gauze, cut one-half inch wide and rolled tightly, introduced by the dressing forceps. When a piece of gauze comes away clean I introduce another piece, and leave it from thirty-six to forty-eight hours. This sometimes causes pain while it remains in position. More often I hear by the third day: "Doctor, I am already glad that I had the operation performed." I do not examine the patient for a week, when she is able to go home. I then find the uterus looking healthy, no discharge on introducing the sound, and no leucorrhœa. I learn from the patient that already the other symptoms are disappearing.

In the three cases which I shall report, the first had marked gastric and intestinal trouble; the second, such marked nervous trouble that the family feared insanity; and the third, a condition of general prostration and malaria.

CASE NO. 1—American, office girl, age nineteen; cramp-like pain at menses, backache, dark-colored, offensive, profuse flow, lasting four or five days; obstinate constipation of years' standing, feeling of slime in stomach, flatulency, immediately after eating her abdomen would become so large she would have to loosen her clothing, incontinence of urine, pain in back and side, a weak, languid feeling, with entire lack of ambition.

Physical examination revealed general pelvic tendencies and an adherent clitoris.

September 29 I did the operation, dilated and curetted the uterine canal, broke up adherent clitoris and dilated the sphincter ani. The patient suffered no pain after the operation, returned home in four days, and on the sixth day after the operation returned to her work. She writes me: "Before I commenced treatment with you I was in very bad health, suffered so with constipation that I had to take a cathartic daily, was troubled with indigestion, had severe pain in back and sides, had discharge of the urine constantly, so painful that I almost fainted; would also bloat after eating, which was very disagreeable; was tired and languid, with no ambition whatever. As soon as I commenced treatment with you I began to improve in every way, and after the operation I was decidedly better; in fact I never felt so well in my life." At the end of six months she had gained seventeen pounds; her menses were painless but

still dark, profuse, and offensive. In this case I attribute much of the improvement to dilating the sphincter ani.

CASE No. 2—To quote the patient's words: "I have always had painful menstruation, so that I lived in constant dread of the period; each year it grew worse until it became unbearable. I had pains both sharp and bearing-down in the lower abdomen, a burning in the uterus, a pressure or bearing-down in the rectum, and when on my feet to any extent a terrible burning feeling in the ovaries, and that was worst of all to bear; extreme nervousness and irritability; I had little appetite, and was despondent; I was thin, and my face had a drawn, worn look."

On examination I found both ovaries enlarged and tender, endometritis with a very profuse leucorrhœal discharge, external hemorrhoids. This patient had always had bladder trouble, evidently a reflex symptom.

As the idea of an operation was very disagreeable to her gave her a few week's preparatory treatment, and during that time she drank lithia water daily.

December 6 I did the curetting. I removed a small mucous polypus and a very large amount of debris. That evening her temperature went up to 100° F., but next morning it was normal, and remained so. She had nausea and vomiting for two or three days, which I controlled with ars. alb. 3x. She also had a tendency to retain the urine, with a stinging pain when it was voided. This was relieved by apis mel. 3x, otherwise she felt perfectly well. A week from the day of the operation when I expected to cease my visits her menses appeared. They were perfectly painless, and she had none of her former nervousness. The following month she took cold during her menstrual period, and suffered in consequence for one day. She has scarcely suffered at all since then. In her own words: "Since my operation four months ago I am almost free from pain, have a good appetite, can control my nerves, and have gained twenty pounds." In her case the nervous symptoms bordered on insanity. Her constipation still persists in spite of all I can do to remedy it.

CASE No. 3—Colored girl, servant, age twenty; present trouble of one year's duration. Pain in left ovary, sharp, comes and goes quickly, worse at menses, bearing-down in uterus constantly, leucorrhœa, flows three days, blood dark, prostrated at times, back-ache, dyspepsia, flatulency, bloated abdomen, very nervous, blue, cries easily, restless, does not get to sleep until morning, frightful dreams, dreams of death every night. Physical examination revealed endometritis, much leucorrhœa.

November 5. Curetted, removed so much debris, looked as if

entire uterus might have been scraped away. Patient improved for four days, and was about ready to get up when she took cold and had symptoms of peritonitis for a few days. This I controlled with bry. alt. 3x, and hot fomentations over the stomach.

Discharged the tenth day. Since the operation she has gradually gained; now she reports no pain at menses, no leucorrhœa or dyspepsia, sleeps well, has gained in flesh. She still bloats at times, and has pain in left ovary following hard housework.

We are apt to attribute all the nervous and reflex symptoms of women who have lacerations of the cervix and perineum, to the cicatrical tissue pressing on the nerve endings. However, I find all these symptoms present where there is a large, heavy uterus with inflamed lining membrane, and the patient has never borne children.

REPORT OF THE BUREAU OF NEUROLOGY.

LAURA C. BRICKLEY, M. D., *Chairman*, Harrison
"Nagging."

J. D. BUCK, M. D., Cincinnati
"Self Control and Auto Hypnotism."

CHAS. HOYT, M. D., Chillicothe
"Some Points in the Treatment of Mental and Nervous Diseases."

J. P. HERSHBERGER, M. D., Lancaster
"The Treatment of Chorea."

NAGGING.

BY LAURA C. BRICKLEY, M. D., HARRISON, O.

When Douglas Gerrold wrote the series of "Mrs. Caudles' Curtain Lectures," he gave only one-half, and that the better half of the subject. True, he drew fairly well the portrait of the nagging woman, but what of the nagging man? We all know him individually and collectively. We physicians have been compelled to seek the cause of many troubles too deep for the casual observer. To the community at large a "nagger" of either sex is simply a nuisance to be avoided when possible, or be allowed to have things their own way for peace, but we, like Patrick Henry, soon learn that there is no peace to be had at any cost.

There is a scientific aspect of nagging which is of no little interest to us.

1. The effect on the person who nags.
2. On those nagged.

On the former, it must be promised that perfect health has as its chief factor content of mind; a nervous man or woman who is anxious, dissatisfied with the surroundings, discontented, always seeing the dark side of the cloud, never the silver lining, neither can nor does enjoy good health. This mental turmoil causes indigestion, by drawing the blood needed in the digestive process from the stomach, by the excitement in the brain, and consequently the "nagger" suffers, and all those unfortunate enough to be connected with him.

You find them generally cross, discontented, unhappy looking in appearance, people of one idea written all over them, and that SELF written with a great capital I. Like all bad habits it grows by what it feeds upon, and they never allow themselves to become hungry.

We all understand what a disagreement in judgment means, and what it means to argue. We all know when we meet people who disagree with us on every subject; say, the silver question or income tax. There is a certain excitement produced though the subjects be pleasant enough. During the discussion one is apt to feel the heat in the head, or one's hands will become cold and moist, or

the room which was comfortable before grows close and warm. This simply means that the excitement produced by the argument, pleasant as it may be, has had a reflex action on the nerves, and they in turn have caused a quickened heart beat. If a friendly, pleasant argument will set in motion such a train of symptoms, what will be the result if nagging is indulged in day after day. When we stop to consider its dire effects on a highly nervous organism, the great wonder is that there are not more insane or suicides of both "nagger" and nagged.

Nagging involves a vast and destructive waste of nerve force. We are all familiar with such cases, and they try one's temper and charity in all that the word implies, and medical ability to the very limit of endurance.

It has caused me many hours of serious thought how to better their condition physically and mentally, thereby making the home circle what it was ever meant to be—the one place for rest, peace, and love.

A case in point of a well-read, artistic gentleman; a man of high, moral standing, honest, industrious, and when so inclined a very pleasant companion; but when something runs counter to his lordship, then it is that his wife needs all her fortitude and our sympathy. The most efficacious treatment in his case has been salicine, dioscorine, or nux, crude, and mother tincture; he does not need any high potency, and I wonder if he had had a little more mother discipline when a child if he would be such an unhappy man, or if he were less selfish whether he could not by using a little will power, of which he has an abundance, ward off an attack, or be more considerate.

Another case, that of a woman laboring under the delusion that it was a mark of distinction to be an invalid. She had been treated by physicians at home and abroad, and in the course of events my time came. I was not as successful as Cæsar who came, saw, and conquered. I examined her thoroughly, found no organic trouble, some slight digestive derangement, but a determination on her part not to get well. After two or three dilatations of the sphincter ani there was marked improvement. She got up, dressed, and went out riding, and was in a fair way to recover, but that did not suit her. She wanted to be the first and only consideration of every one in the house, so she returned to bed, imagined she could not lift her hand even to feed herself. Words fail to express my disgust when

I found her in bed. After trying in every way to help her, and not succeeding, I told her what her husband had better do with her, for her own sake as well as for his health and comfort, but it was time wasted.

In searching for the predisposing or exciting cause of an affection, it is well to begin by first ascertaining what are the surroundings, occupations, habits, and in fact the conditions of his or her daily life. It is folly to hope to combat morbid states therapeutically, so long as we ignore the circumstances that have called them into existence, as unhygienic conditions, long hours of work or study, irregularity of meals and hasty eating, and excesses of all kinds. We should begin rightly if we first endeavor to remove or modify these antecedents, before we trust to drugs for purpose of restoring tone to the muscles, energy to the nerves, quality and color to the blood. Having attempted this, it behooves us next to discriminate carefully in the choice of a remedy that will be adapted to the special needs of the individual case.

The remedies which have served me well are dioscorine, salicine, lycopodium, belladonna, and passaflora, as indicated.

SELF-CONTROL AND AUTO-HYPNOTISM.

BY J. D. BUCK, M. D., CINCINNATI, O.

I think it will be readily admitted that if our theories of life were based upon an accurate and complete knowledge of the entire man, the result of action in life based upon such theories must be altogether satisfactory with those whose motive is to use the highest and noblest means to secure the best ends.

By inverse reasoning it must be admitted that the result of action at present is incomplete and altogether unsatisfactory. Our theories are therefore defective, and our knowledge of the nature of man little more than organized ignorance.

The general proposition, that man ought to exercise self-control will be universally admitted, yet how many, even among physicaans, have ever tried seriously to analyze such a proposition into

its constituent elements, in order to determine the mechanism, either physical or metaphysical, that is involved, and the laws and processes that underly it. What is the "self" that is to be controled? and the "man" that is to control it? That one may gain some measure of self-control by mere impulse, or purely empirical methods is quite true. Just as one may pick out a tune on a violin and yet know nothing of the laws of harmony, the principles of music or the mechanism of the violin beyond its outer form. If we are to be satisfied with empiricism while pretending to be scientific, of coarse nothing more must be said on the subject.

If we are to work straight through the syllabus prepared by our Secretary, which contains over seventy titles, it will be impossible for us to enter into the details necessary to demonstrate the points named, though it would be easy to do so if time were allowed. Stated in brief, the "self" that is to be controled is the body, the appetites and passions of the lower personal life, and the mind that is in direct relation through these with the outer world by the agency of the brain and nervous mechanism. Let us call this man's lower-self, or personality. It is to be controled by Man, the Thinker; that is, repressed or energized and girded, as the driver guides the well-trained steed. The motor power in this guidance is said to be the Will, and back of will stands desire, and back of this, motive; that is, the end to be achieved.

Taking now the dictum of the Cartesean philosophy—*Cogito ergo sum*—and regarding the *thinker* as the real man, we shall find that of reason and the understanding, will bring the active agent. Now this realm of reason and of understanding is able to adjust itself to all the varying phases of experience in order to excite to action, withhold from action, and regulate the thoughts, feelings and acts of the personality. All this is directly involved in the expression, self-control. Back of reason, understanding, and will, lies a motive that may be and should be fixed and determined. Yet is seldom clearly and consciously so, because few persons analyze the real motive of life; few are really more than half awake from the sleep of the senses. Many have good impulses alternating with passions and evil impulses, but few have a clearly defined motive in life, shining like a blazing star in their mental firmament. It

may thus be seen that self-control means self-knowledge and self-mastery, making the whole mechanism of man subordinate to a motive or high ideal, and directing it by a strong will, guided by reason and understanding toward the object of life. This, I take it, is in the highest sense, the meaning of self-control.

Auto-hypnotism is precisely the opposite of all this, though it is generally taken for the same thing. With self-control in the realm of reason and understanding, man possesses knowledge gained from experience. In auto-hypnotism, knowledge, or rather its semblance, possesses the man. Here lies just the difference between sanity and insanity, a healthy and a diseased mind. In health the thinker subjects all ideas or mental pictures to the calm, dispassionate judgement, and thus by discriminative measures, adjusts and understands. In disease, the thinker is dominated by an idea, *obsessed* by it, so that all else is out of joint, and the whole panorama of ideas and events is deranged. Man loses his bearings and we say, "loses his mind." The difference is practically that between freedom and bondage. Now this process of dethroning reason, suspending judgement, and obscuring the understanding by subordinating the will to an idea, is the very essence of hypnotism, and where this is done by the individual himself, it is auto-hypnotism. It is from the beginning a disease and an insanity, a real obsession. We are continually putting false estimates on things; mistaking the seeming for the real, the illusory for the permanent, the temporal for the eternal; not because we are really incapable of discrimination, but because we are caught in the meshes of illusion and fail entirely to exercise self-control. We allow ourselves to be taken possession of, instead of possessing ourselves. It makes all the difference in the world whether we know and possess ourselves, or hypnotize ourselves. It is just the difference between the garden of the gods and a fool's paradise; between the laurel crown and the cap and bells—In short between the clear open brow and calm, judicious understanding of the philosopher; and the leer of the imbecile or the grinning idiot; that is to say, it makes all the difference in the world whether we learn and exercise self-control or indulge in auto-hypnotism.

THE TREATMENT OF CHOREA.

BY J. P. HERSHBERGER, M. D., LANCASTER, O.

The patient with chorea should first be removed from all influences that tend to excite him in any way. If a child going to school, it should be removed from school at once, placed in a quiet place, and isolated from other children if possible. If the case is severe and a small child, confine it to bed, allowing it plenty of toys to amuse itself with. Give plenty of nourishing diet and as much concentrated nourishment as possible. This may be accomplished by giving Murdock's Liquid Food, Bush's Bovinine, or some similar preparation. If a history of predisposition to tubercular troubles can be elicited place him on some preparation of cod-liver oil. If a boy, see if any reflex factor can be found. Sometimes a circumcision may benefit your case very much. The remedies recommended by various authors for the affection are legion, but I only propose to take up those most frequently used.

Arsenicum album is a remedy for chorea only in the lower attenuations 2x generally, and rarely 3x. I have obtained the best results from 2x, and it is indicated in cases where patient is poorly nourished, the digestion is poor and patient is pale and anemic, especially in case where chorea has been preceded by malarial fever, in stubborn cases with the following symptoms, uneasiness in legs, has to change position of feet all the time or walk about to get relief.

Cimicifuga racemosa. Cases in young girls about the age of puberty with menstrual irregularities, they complain of muscular pains, with choreic movements worse on left side, sleeplessness, depression of spirits, and other evidences of mental derangement.

Tarentula hispania. The choreic movements are mostly on the right side. Constant movement of arm and legs; cannot keep quiet; excessive hyperesthesia, aggravation by the least touch; headache better by rubbing head on pillow, the termini of the nerves become so irritated that some kind of friction is required to give relief. This seems to be a purely nervous remedy, acting deeply and powerfully on the cerebro spinal nervous system. The tarantula cubensis seems to act more on the blood, and hence does not do so well in chorea.

Some six years ago was called to see Mrs. B., age about nineteen years; primipara; found her two months advanced in pregnancy, confined to bed, the choreic movements being so violent that it was impossible for her to lie quiet almost a single moment. She was unable to take any nourishment for several days before I saw her, being unable to swallow on account of the violent choreic movement, and could only be quieted by gentle friction of limbs but as soon as any nourishment or water was offered her the movements would begin. I gave a very grave prognosis based on the following opinion expressed by Lullam. "Diseases of Women," sixth edition, page 320. "If chorea begins quite early in the period of gestation, it will probably continue until its close, for while the cause remains the effects must continue, and it will not cease until the gravid uterus is emptied of its contents," but within twenty-four hours after the administration of *tarantula hispania* improvement set in with a complete cessation of all choreic movements within two weeks, and no further appearance of them. The term of pregnancy was completed by a normal labor. She has given birth to two children since with no more trouble from chorea. I learned from her mother that at the age of twelve years she had chorea for eight or nine months.

Agaricus is highly recommended by Bartlett especially the agaricine, he gives one grain tablets of the 2x trituration every two hours. The characteristic symptoms are itching of eyelids or of different parts of the body as if they were frost bitten, spine very sensitive to touch.

Causticum when the muscles of tongue are affected; words are jerked out of mouth, during sleep arms and legs are on the go.

Mygale in uncomplicated cases of chorea; patient low-spirited and depressed, complains of dull pain in forehead.

Zizia is a remedy that may be of use in chorea for the paroxysms themselves, when they occur during sleep.

Quinine for twitching of eyelids where there is present a wandering neuralgia, also *ratanhia*.

Cuprum aecticum is highly praised by some.

The cardiac complications of chorea may call for *spigelia*, *arsenicum iodide*, *digitalis* or *apocynum*.

SOME POINTERS IN THE TREATMENT OF MENTAL AND NERVOUS DISEASES.

BY C. HOYT, M. D., CHILlicothe, O.

Nervous suffering from mental and nervous diseases have, as a rule, inherited a weakness or tendency in that direction, and this tendency has been fanned into a flame by bodily infirmities and unhappy surroundings. If we accept this proposition as true, our first duty when called upon to treat a case of this kind, is to remove as far as possible, every form of irritation wherever located. The surroundings of the patient should be made as pleasant and satisfactory in every particular as possible, and all forms of mental irritation removed. We should then direct our attention to the removal of the bodily infirmities that cannot be reached by the law of similars and the indicated remedy. I am satisfied this cannot be done without a thorough knowledge of orificial methods and reflexes as taught by Dr. Pratt, of Chicago.

As Prof. Pratt has well said, the irritation of every organ starts at its mouth. This being true, one can easily see how very important it is in the treatment of diseases of the nervous system to have all the orifices of the body in a perfectly normal condition. When called upon to treat a case, if the patient be a woman, her case should be carefully examined for any uterine or ovarian trouble of any kind, and everything abnormal corrected if possible. The clitoris and its hood examined, and if found to be a cause of reflex irritation an operation should be made. The rectum should be most carefully explored, the sphincters thoroughly dilated, piles, pockets, and papilla removed, so that this great source of reflex irritation can no longer be a cause of trouble. The nose and throat should come in for their share of attention, and be put in as nearly a normal condition as possible, so that every form of orificial irritation wherever found will be removed.

In males the prostatic inch of the urethra, as well as the prepuce and the rectum, should be carefully examined and put in as nearly a normal condition as possible. After this has been properly done we have gone a long way towards relieving and curing our patients suffering with mental and nervous diseases. Then if our patients

are not entirely cured, we have placed them in a position to derive the greatest possible benefit from the indicated remedy, which before could have acted only very imperfectly.

We must not trust blindly to the indicated remedy, and ignore the wonderful benefits to be derived from properly applied orificial methods. In my opinion every institution in the land devoted to the care and treatment of mental and nervous diseases, should be supplied with a physician that thoroughly understands the practical application of orificial methods, as by so doing many cases that by other methods of treatment are incurable, can be restored to health and lives of usefulness. I would also call attention to the wonderful benefits to be derived from use of Turkish baths and massage treatment, particularly in cases of nervous trouble. I do not think there is any remedy so useful after the case has been correctly treated orificially.

I would not in the least ignore the value of other indicated remedies, but the treatment mentioned is, in my opinion, the very first to be considered in every case, and where they have been intelligently used the selection of the other indicated remedies will be an easy task.

REPORT OF THE BUREAU OF CLINICAL MEDICINE.

T. T. CHURCH, M. D., <i>Chairman</i> ,	Salem
"Bronchitis."	
H. E. BEEBE, M. D.,	Sidney
"Mercurius Cor. in the Treatment in Bright's Disease."	
G. D. GRANT, M. D.,	Springfield
"A Cure of the Morphia Habit by Permanganate of Potash."	
L. G. GRISTE, M. D.,	Twinsburg
"Recurrent Measles."	
H. B. GARRIGUES, M. D.,	Masillon
"Two Cases of Insanity."	
J. P. HERSHBERGER, M. D.,	Lancaster
"The Treatment of Pneumonia."	

BRONCHITIS.

BY T. T. CHURCH, M. D., SALEM, O.

It is not my intention to enter into a lengthy discussion of the origin, history, diagnosis, symptomatology, prognosis, and general care of cases suffering from bronchitis, but only to call your attention to some of the remedies used homeopathically in this disease.

Neither is it my desire to undertake to give you the indications for all the remedies which may be usefully employed, but only to call your attention to some of them, and allow you to introduce any favorites you may have in the discussion which I hope will follow this paper.

My grouping of remedies is very general. During the beginning of an attack one of the following drugs will probably be indicated:

Aconite is of great value at the very beginning during the inflammatory stage; it suits a loose as well as a dry cough, but will do best in a dry cough aggravated at night. Good in dry bronchial catarrh, where there are long fits of dry morning and evening cough.

Belladonna may be useful at the beginning, when we find the patient feverish, with hot skin tending to moisture, nervousness and general restlessness.

Bryonia also at the beginning. Cough apt to be dry and tight, worse from motion or coming into a warm room from a colder temperature; pains in chest, under ribs, in pit of stomach, or head from coughing, combined with a rheumatic tendency; involuntary urination during coughing. Compare causticum and pulsatilla.

Ipecacuanha may be very useful whenever the bronchitis takes on the asthmatic type; the chest seems to be full of phlegm, but it does not yield to coughing. Compare Antimonium tartaricum, lachesis, lycopodium, and veratrum album.

Mercurius. Herschel says of it: "Where is there a more certain, a more specifically acting remedy for the appropriate kinds of cough of a catarrhal inflammatory organic nature, running down from the fauces through the trachea and into the finest bronchi; decisive in acute affections, ameliorating in the chronic, slime-loosening resolvent; restorative, where there are roughness, burning feeling of soreness from the fauces down to the sternum, hoarseness of voice, dry cough, raw, concussive, exhaustive; sputum ropy, watery, spittle-like, nasty, bloody; catarrhal headache, coryza,

diarrhoea, fever, non-ameliorating night sweats—here is the province of mercurius. It is the sovereign remedy of inflammatory bronchial catarrh.

Spongia. While this remedy is of most value in inflammations of the larynx and trachea, it is occasionally useful in bronchitis with pain in chest and very dry, hoarse, suffocative cough.

Veratrum viride should be considered at the beginning, and while its action is more properly exerted on the lungs, yet is of value in vesicular bronchitis with high fever, nausea, and vomiting.

In the second stage, or where dame nature is trying to clean house and remove the accumulations of the winter or active stage, the following will probably be needed:

Antimonium tartaricum. Especially in the second stage, where the secretion of mucus is profuse, but the expulsive power feeble, so that much rattling of phlegm can be heard, a dry cough, yet sounds as if it ought to be very loose. Compare *ipecacuanha*, *lachesis*, *lycopodium*, and *veratrum album*.

Causticum. Has a dry, hoarse cough, expectoration comes up only far enough to be swallowed, and each coughing spell is accompanied by involuntary urination. Compare *bryonia* and *pulsatilla*.

Chelidonium majus. Is useful when the difficulty is on the right side; there is a pain under the inner lower angle of the right shoulder-blade, accompanied by more or less disturbance of the liver.

China may be needed in passive congestion and anaemia.

Eucalyptus, where the fever has diminished and the second stage is present, the cough is obstinate, frequent, and irritable, and the expectoration is thin. It is also of service in chronic bronchitis or bronchiectasis, with profuse secretion of offensive muco-pus.

Eupatorium perfoliatum. Has a nocturnal loose cough, accompanied by great pain in back and limbs; the body is bathed in perspiration.

Hepar sulphuris. Is useful after *aconite*, *bryonia*, *bromium*, *mercurius*, or *spongia* has advanced the case to the stage of resolution, or in moist coughs resting on a catarrhal basis; rattling, choky cough with hoarseness; some pain in throat, extending to ears; patient cannot bear to be removed, coughs when any part of the body is uncovered, sweats day and night without relief, and takes cold easily.

Iodium. The cough is short; like sulphur, it is oftener loose than dry, accompanied by a thick mucus and puriform expectoration, often bloody.

Lachesis. Has no power over bronchitis as such, but is indicated when the cough is spasmodic and suffocative, and though abundance of fluid mucus is heard in the chest, it is not expectorated or only after long effort. Such coughs occur especially in the subjects

of cyanosis and cardiac diseases. Compare *antimonium tartaricum*, *ippecuanha*, *lycopodium*, and *veratrum album*.

Veratrum album. In capillary bronchitis, second or loose stage where mucus is secreted in great quantities, this rattling mucus is expectorated with great difficulty.

If these have not been successful, if it is a sub-acute case, or it threatens to become chronic, the following may be thought of:

Ammonium carbonicum. Causes an irritative cough, with increased secretion of bronchial mucus, or an increased cough caused by a sensation of down in the larynx.

Arsenicum album. In all kinds of coughs, but particularly in dry coughs; patient cannot lie down, and is worse in stormy weather; of use specially in old people of low vitality, when the expectoration is thin and excoriating, accompanied with a dry, burning sensation. It is well to select *arsenicum* from the general conditions of the patient.

Kali bichromicum. In sub-acute cases, expectoration tough, tenacious, glutinous, and stringy, usually associated with some disturbance of the digestive system.

Lycopodium. In chronic cases, when expectoration is copious, purulent, and foul smelling, accompanied by gastric irritation and exhaustion, the tendency toward phthisis is pronounced. *Lycopodium* greatly resembles creosote, *hepar sulphuris*, and *pulsatilla*. The cough is loose and rattling, but the expectoration is not easy; the cough sounds very loose, but the secretion remains in the tubes very tenaciously. Compare *antimonium tartaricum*, *ippecuanha*, *lachesis*, and *veratrum album*. The sputa is thick, yellow, or greenish.

Phosphorus. In sub-acute or lingering form, in delicate, overgrown or phthisical subjects. It will do good in these persons when they have hacking, dry coughs, with sensation of tickling and perhaps dryness and burning in the larynx. Dry, tickling cough in the evening, with tightness across the chest; expectoration in the morning. Cough worse coming from a warm room into colder air.

Pulsatilla. Is sometimes very useful in sub-acute and chronic bronchitis occurring in delicate persons, accompanied with much mucous expectoration; is valuable for coughs that are loose by day, but become dry and tickling on laying down at night. Urine is emitted during each cough if patient is a female. Compare *bryonia* and *causticum*.

Sanguinaria canadensis. Either in the sub-acute or chronic form, when the larger bronchial tubes are involved and the stage of mucous secretion has been reached. The cough sounds very loose but the secretion of mucous is expectorated with great difficulty.

Compare *antimonium tartaricum*, *ipecacuanha*, *lachesis*, *lycoperdon*, and *veratrum album*. Dr. Holcombe says of it: "I prescribe it in a certain troublesome, harassing cough without marked inflammatory action, when you are uncertain whether you are dealing with a chronic bronchitis or an incipient phthisis. It has done me more good in pulmonary diseases than any other single remedy. *Calcarea 200th*, one powder before breakfast, and one powder of *sanguinaria* 1st an hour after each meal, has procured me more reputation and business than any other one prescription I have ever made."

Staunum. In chronic bronchitis, with profuse, greenish expectoration and great debility. Debility and neurasthenia being specially characteristic of this remedy.

Sticta. May be useful occasionally, and is characterized by excessive dryness of the mucous membranes.

Sulphur. In chronic bronchitis, with excessive collection of mucous or muco-purulent matter, with loose, rattling cough and easy expectoration, especially in the day-time. At night the mucous is more tenacious and raised with difficulty, but it becomes easy in the morning. Patient is very sensitive to cold, damp, rainy weather, and feels the least change. Is often useful as an intercurrent and when other remedies fail.

In scrofulous conditions it will be well to think of *calcarea iodata*, *silicea*, and *sulphur*.

Calcarea iodata. In chronic bronchitis of scrofulous children; when in a thin subject the cervical glands are much swollen and the cough dry.

Silicea. In organic diseases of the air passages when suppuration has taken place, with a suffocating, racking, loose cough, purulent expectoration of thick yellow mucous, of greenish-yellow, offensive matter that sinks in water. In chronic bronchitis and consumption with debilitating night sweats.

When bronchitis affects old people, the following will likely be useful: *Arsenicum, album, carbo vegetabilis, china, lycopodium, senega, and sulphur*.

Carbo vegetabilis. In chronic neglected bronchitis of old people, with hoarseness, profuse expectoration or accumulation of mucus, blue nails and cold hands and feet.

Senega. Causes a great deal of cough, mostly dry, and all kinds of pains about the chest. In bronchitis of old people, when the cough is irritating and shaking. In some cases it causes an increased secretion of mucous with loose rattling cough.

When there is a special tendency in the patient or his family toward rheumatism in its various manifestations, these remedies may

come to your relief as well as that of the patient who confides in your skill:

Actaea racemosa, *bryonia*, *mercurius*, *mezereum*, and *rhus toxicodendron*.

Actaea racemosa. Has a cough excited by every attempt to talk. Compare *bryonia* and *china*.

Mezereum. Has hoarseness with cough, rawness or constricting pains in the chest, or stitching pains, rheumatic in nature. After eating, coughs until he vomits. Compare *bryonia* and *ippecacuanha*.

Rhus toxicodendron. The nasal, laryngeal, tracheal, and bronchial passages seem stuffed up, commencing at about sunset with sneezing and dry, hard, tickling cough, continuing very severe until midnight, when all the sufferings are relieved, to be renewed the next evening. Accompanied by rheumatic conditions.

MERCURIUS CORROSIVUS IN THE TREATMENT OF BRIGHT'S DISEASE.

BY H. F. BEEBE, M. D., SIDNEY, O.

It is to-day quite well settled that chronic Bright's disease, particularly the contracted kidney variety, is due to vaso-motor disturbances. That it is a general rather than a local malady, and can very properly be classed with the neuroses. The etiology, the pathology and treatment, all confirm this view. While there may be and are many primary causes, the real trouble is a derangement of the nervous ganglia controlling the nutrition of the renal structures, and the primary changes are to be looked for, away from the kidneys, not in them.

Among other well established facts is the action of mercury upon the organism in general, and *mercurius corrosivus* in particular upon the kidney. There are no real specifics for disease in medicine; none uniformly successful; and we do not advocate the use of this remedy in all cases, nor to the exclusion of other drugs and measures in renal diseases of this type, but it comes as near being a specific as we ever get to it. After poisonous doses of mercury the drug is eliminated chiefly by the kidneys; but at the

same time they are much injured by this office, suppression of urine is a very common phenomenon. It also affects the whole system, penetrating every organ and tissue, by depressing the great automatic organic nervous system, the seat of vitality.

On the kidneys, which are mainly supplied with organic nerves, it causes congestion, inflammation, albuminuria, and even diabetes, though the latter is not an organic kidney trouble, the sugar is probably due to the action of mercury upon the pancreas. While all this is deemed the primary action of mercury, it is hardly true, for the congestion is not of an active form, it is of the venous variety, derived largely from the close relationship of the venous to the lymphatic system, where mercury spends most of its primary action. When we consider the dependence of the venous system upon the lymphatic, we can plainly see how the action of mercury on the kidney is caused. In the same way the investigations of Dr. Stanbury seem to prove that the relationship between the renal lesions in Bright's disease, and the changes observed in the ganglia and surrounding connective tissue, must be regarded as secondary rather than primary. These lesions, though they be secondary, cause flushing, sweating, tinnitus, headache, faintness, palpitation, constipation, diarrhoea, vascular congestion of the intestines, diuresis, etc.

In the pathogenesis of mercury the earnest student of *materia medica* finds this same group of symptoms, with, of course additional ones, all too well-known to repeat many of them here. They are doubtless due to vaso-motor irritation mainly, and hence we are able to reason why mercury possesses such well-settled remedial properties. *Mercurius corrosivus* has long enjoyed a wide reputation in *nephritis desquamativa*. Among its symptoms we find haematuria, putrefaction of the mouth, disgusting mercurial fetor from the mouth, suppression of the excretion of urine. Wood says that in the case of poisoning with it, collapse occurs within an hour or two, with small, frequent, irregular pulse, pinched anxious face, cold extremities, and finally death, preceded, it may be, by fainting, convulsions, and coma. The urine is very much lessened in quantity, is sometimes albuminous or even bloody, and not rarely is suppressed.

In convalescence after severe poisoning, it is slow and protracted. Mercurius corrosivus seems to be best indicated where there is dysuria, urine turbid, pale-brown or blackish, and albuminous. The urine after poisoning by mercury shows a decrease of urea, and has considerable quantities of urates; besides it contains epithelia, fibrinous casts, mucus corpuscles, tribasic phosphates, and albuminum. Mercurius corrosivus is a violent acting preparation, and when we wish to bring about a change in a morbid process is more likely the form of mercury needed, since it has so powerful action on the nervous system and sanguineous constitution. It is a question whether its universal use to-day in surgery and as an antiseptic in auto-intoxication, is not detrimental by reason of qualities aside from its germicidal properties. We know well its affinity for the mucous lining of the intestinal canal.

This action is not due to its local effect upon the structure, but to its influence upon Auerbach's and Meissner's plexuses of the sympathetic nerve. Yes, but some one says, how does this effect the urinary organs? Let us look at the intimate relation of all this nerve supply. The renal plexus supplying the kidney is formed by filaments from the solar plexus and lesser splanchnic nerve. Some filaments pass to the spermatic plexus and ureter. The ureters derive their supply from the inferior mesenteric, spermatic, and hypogastric plexuses. The suprarenal capsules are abundantly supplied by the solar and renal plexuses, and one writer says also from the phrenic and pneumogastric nerves. Thus we see the renal structures are largely supplied with organic nerves, thereby any influence brought to bear upon this system is liable to influence the kidneys; mercury having this power it is seen why we find it so often called for in the treatment of kidney disease. We think it very frequently the similimum, and that it should be employed oftener than it is.

Clinical experience, in addition to theoretical reasoning, certainly shows it to be a prominent remedy in controlling untoward symptoms arising during the course of Bright's disease, and if used in the incipient stage we believe it may be many times curative. At least it is a leading remedy in this common malady. Let us make a more thorough study of its action and use. Let us con-

sider well the remarks of a member of the dominant school when he said:

"The action of certain drugs upon the nervous system is the basis of homeopathy. In this our brothers of the opposite faith have been very far-sighted. Most of the remedial agents used by homeopaths have a selective action on the sympathetic nervous system."

Is this true? _____

A CURE OF THE MORPHIA HABIT BY PERMANGA- NATE OF POTASH.

BY G. D. GRANT, M. D., SPRINGFIELD, O.

On the 15th day of last August I was called to see Mrs. M., who had been ill for two weeks, and who was unable to find the physician who had her under his care. I was urged to come quickly, as she was suffering very much, and could not stand it much longer.

I found her vomiting pure bile, and as soon as that was over she threw herself back on the bed grasping her hair in both hands, head thrown back, screaming with pain in her head, part of the time in both temples and then at base of brain. This they told me was the way she had been for some time, and that when these paroxysms came on her physician had been giving her morphia, and that nothing else would do. I did likewise, and saw the vomiting stop, headache ease up, and a complete change come over my patient. At that time I did not learn how long this had been kept up, and when, on the next day, I was called again and found the same state of affairs, only that this time it was pains in stomach and not so much in the head, and that the history was that of shifting from one point to another, never two days alike, but that the vomiting was always thin, and only stopped by use of morphia.

I had congratulated myself the preceding day that I was only a transient in the case, and that the physician in charge was surely getting into deep water, and that I was glad the case was not mine, when they announced to me that I was to take charge and get her out. As a general thing I do not like these hard cases, but thought

I could do no worse than my predecessor, and so took hold. She at first only needed one-quarter grain a day, but rapidly went on until it became necessary to give that dose three, four, and five times a day. I was called every few hours, day and night.

A history of the case showed an extremely nervous woman, who had suffered with sick headache all her life; had two children, the last labor a very slow, tedious labor, some eight years ago; three years ago a miscarriage and fever following with such an end as I had found her in, and that the physicians had used morphia for weeks to control her; and that she was brought home a wreck, but finally got out, needing morphia to get through each menstrual period. I found a stellate cicatrix of cervix, and a slight pressure on the largest one on left side would bring on pain and vomiting, even if she had a full dose of morphia. I fought the case one month, getting deeper in the mire, and finally informed her husband and her parents that she had better die than go on this way; obtained their consent, called a surgeon, and amputated the cervix, and continued the morphia through the menstrual period, tapered off with morphia at rate of one-sixteenth grain night and morning for one week, when she rebelled. I announced to her that I would stop then and there, and that if they did not back me she never would get over it, and that I had rather see her die than fail. They gave me good support. I determined to try permanganate of potash by the hypodermic, and gave a solution two grains to one-half ounce of water, fifteen drops night and morning. Of course I had to use lots of means, and had a good nurse to keep watch. At such a place as this it is not necessary to describe the actions of a victim of morphia—delirium tremens—and all such only will describe it. When she found out that we were in earnest she helped by a strong will, and, excepting that at night, I gave a solution of bromide potash and cannabis indica, she had no other helps. Each time after a hypodermic of potash she would be very much quieter, and seem to be influenced by it very much as if by the opiate.

Each morning when I called to see her she would tell me of the visions she had seen, and says that she is a firm believer in the devil, because she had seen him every night since I stopped her morphia. She never once asked for morphia after the second day

of the permanganate's use, although she confessed that she did not see how she could ever stand it. We got her out. She has been improving ever since. We had an eighty-day fight, but now she is quite well—menstruates without pain, is not sick at stomach, and her headaches are a thing of the past. In another case I should use smaller doses of the potash, and probably make a dilution to use internally. There was no trouble from the injection, no abscess, no pain, not even a discoloration.

RECURRENT MEASLES.

BY L. G. GRISTE, M. D. TWINSBURG, O.

January 10, 1888, I was called to see John C., a young man of twenty; found a very pretty case of measles in full bloom. In the same house were three persons who never had the disease—a grandfather of seventy, a daughter-in-law of twenty-eight, and her baby of one year. The old man and the baby took the disease, both coming down at the same time and going through without complications. Both convalesced nicely. Seven days after their convalescence was complete the mother was attacked. Three days later, when the rash was well developed in her case, she said to me at my visit, "My baby is not well to-day." On inspection I found him feverish, sneezing, and coughing, with red face and suffused eyes. Looking in his throat I found the measles eruption very distinct on the fauces and roof of the mouth. The next day he was well broken out on face and chest. The day following pneumonia of a severe-type developed. Two days later, and five days from the beginning of the recurrent attack, he died. At the time of death he was covered with the eruption from head to foot.

February 12, 1892, I was called to see Abbie N., aged five years, whose parents lived in an adjacent town. She was visiting her grand parents, who were neighbors of mine. I said to the grandmother, "This child is coming down with measles." She replied, "Impossible, for she is just convalescent from an attack." I found on inquiry of the doctor who had treated her that this was true, and

that there was an interval of two weeks between the attacks. Two children living in the same house contracted the disease from her; also three other children from neighboring families, who had visited her. The case was a severe one. Her parents assured me much worse than the first attack.

Two years later, March 5, 1894, I was called to Miss Abbie, who was again visiting her grandfather; found her for the third time with measles. On inquiry found that she had been exposed to the disease about two weeks previously. This proved to be the most serious attack of all. Although a perfectly typical case, it was very severe, and her convalescence was tedious.

In looking up authorities on the subject I find but one case reported, and that is by Baehr. He says the disease "recurred in three weeks after desquamation with *severe* constitutional symptoms," and in my experience the recurrence has been much more serious than the primary attack. Some authors deny the possibility of a second attack, while I find none that report a third one.

TREATMENT OF PNEUMONIA.

BY J. P. HERSHBERGER, M. D., LANCASTER, O.

In the treatment of pneumonia, poultices to the chest are used by a great number of practitioners, but I have never been able to derive from them benefits commensurate with the trouble and inconvenience incurred by using them. I have the chest covered by a layer of cotton batting, and have this covered by oiled silk.

Aconite will, if given early, before there is any local inflammation, cut short a great many cases. It is indicated by a high, bounding pulse, rapid respiration, sharp, hacking cough, teasing in character, with crepitant vales and frothy sputa, attended by much restlessness of patient.

Ferrum phosphoricum, in cases that have a full, round pulse, soft in character. The inflammation has not yet gone on to exudation, with a mucous discharge streaked with blood.

Bryonia, especially in cases of the croupous form. After exudation has begun, cough hard and painful, with sharp stitching pains

in chest; better lying on the affected side. The anguish is now traceable to the oppression of breathing and not to the fever.

Tartar emetic in pneumonia which begins in a bronchitis and extends downwards; called for in the catarrhal form; mucous rales are heard distinctly in chest with an inability to expectorate much.

Phosphorus when bronchial symptoms are prominent. There is not much pain in chest; patient is drowsy, with a tendency to a typhoid state, especially indicated in patients who have an hereditary tendency to consumption, or have had bone disease in early childhood.

Sulphur when resolution does not take place promptly. In cases of a torpid character, with slow hepatization, this remedy is too frequently neglected.

Hepar sulphur calcarea after the stage of resolution has set in; expectoration of a thick muco-purulent character indicated when there is a tendency to the formation of abscesses in lungs.

Lycopodium in neglected cases taking on a chronic form.

Arsenicum iodide in cases of catarrhal pneumonia which are becoming chronic.

Sanguinaria is indicated by a very distressing amount of dyspnoea, hands and feet burn, weak, faint feeling about heart, patient covered with sweat, and suffers from nausea.

Chelidonium in cases of what are termed bilious pneumonia.

Lachesis in cases of a typhoid form, accompanied by low muttering delirium, with hallucinations; threatened gangrene.

AN EXPERIENCE WITH TWO INSANE PATIENTS.

BY H. B. GARRIGUES, M. D., MASILLON, O.

On the evening of May 29, 1886, I was called to see a little girl at a farm house about three miles from town. I made the drive in good time, and arrived about 8 p. m., walked in where the child lay, in a temporary bed arranged for the occasion.

After a few general questions to the father and mother, I took out my watch and proceeded to examine the pulse. At this time I noticed a noise in an adjoining room. It sounded like a voice, and began in a low pleading tone, and finally developed into cries for Help! Murder! For God's sake open the door! He is killing me! You can imagine my feelings. I turned to the mother of the child

—found her crying. The other occupants of the room were making no move. I asked the lady what the noise meant? What was the cause? She said it is father abusing mother; you know they live with us.

The door was closed between the room we were in, and the one from which the cries came. Finally in a desperate tone of voice came the cry, If you don't help me he will kill me! Open the door!

All this time I was looking in silent wonderment from one to the other of the people. Mrs. B. now asked me to step into the kitchen, where she begged me to advise her what to do. She said, "her father, a man of sixty-eight, was madly jealous of her husband—and indeed of all men; and that this kind of thing was apt to occur, although this was the worst experience they had ever had."

I stepped to the door and called Mr. B. out where we were talking, and asked him what he was going to do. He replied, "the old man will kill me if I go in there, as he will allow nobody in their bed room; I cannot do anything." Mrs. B. then turned to me, saying, "What in the world will I do? Won't you help us doctor?" I told her I was going to do one of two things pretty quick, and that was either stop the row, or get out of the neighborhood. I finally made up my mind to interfere. Stepping back into the sitting room, I tried the bedroom door. It was a very old-fashioned affair, and was locked on the inside. I next ran at the door, striking it with my shoulder. The door flew open into the room, and the force of my effort carried me pretty well in. The old folks had no light, so that all I could see was from the light in the sitting room. The furniture of the room was very scant, and consisted of a large chest, a bed, an old bureau, and two or three chairs. Laying on the floor, near the chest, was the old gray-haired woman. The man, a powerful, athletic fellow, with close-cropped hair, white as snow, eyes that shone like stars, had her by the throat with his right hand. He had on only a suit of pink colored underwear, and, as he sprang to his feet and rushed at me, I thought him one of the most active persons I ever saw. All of this took but a few seconds of time. I said to him, "Hold on just a minute Mr. F., before you put me out. It's the doctor; don't you know me?" He had his hand on my shoulder by this time, and I

could feel the fingers twitching. While standing there, in the center of the room, the old door slowly swung around and closed, leaving us in total darkness. I talked as I never did before. The old man was becoming impatient. At this time one of the children pushed the door open, and immediately the old lady, with a cry, rushed for it to escape from the room. Mr. F. sprung at her like a tiger, threw her across the floor, where she fell in a heap near the bed. He then came back at me, and that same door again closed. I now received from him the information that he had a razor, with which he would cut me up, if I did not at once get out. I had arranged no program of action, except to kill time and hope "something would turn up." I talked continuously, and finally, having my left hand on his arm while he had his right on my shoulder, I realized that something would have to be done by me at once or I would be the victim, instead of his old wife. Acting on this, I reached into my coat pocket, removed the cork from a two-ounce bottle about half full of a trituration. The glass was cold to the touch. I gave it a swing around in front of his face, and pressed the small open end of the bottle against his bare neck, at the same time telling him "I had a gun in my hand, and would kill him if he undertook to get away." All of this time not a thing was done for my relief, that I knew of. We stood in that position I think for several minutes, when I heard a quick step on the porch outside and into the house, and into the room rushed William Miller, a Scotch coal miner, who lived near by. He jumped upon the old man, without asking permission of anybody, and after a short struggle we had him in the sitting room. Mrs. B. afterwards told me that she sent one of the children for Miller as soon as I started into the room. I praised her forethought, and certainly was thankful she did. I now cared for the old lady, put up some medicine for the sick child, and left for home. The next morning—Sunday, by the way—a man came in with the startling intelligence that old Mr. F. had gone out into the cow stable, taken a rope off one of the cows, tied one end of it to a timber above and the other around his neck, and hung himself. It seems that the Scotchman stayed with them all night, and in the morning went home for breakfast. A few minutes after he left Mr. F. quietly walked out, without saying

a word, and committed suicide. The coroner's verdict was death as a result of temporary insanity.

CASE No. 2.—I was first called to see Miss S. about a year ago last June. She had at that time a spell of sickness lasting only a few weeks, the principal feature of which seemed to be a decided aversion to doing anything recommended. The lady was thirty-eight years of age, tall and slender, with black hair and beautiful black eyes. She had lived on a farm nearly all her life, was intelligent and well informed on most subjects. She so far recovered at this time as to go about her household duties and seemed, with the exception of being more quiet, much the same as before.

About the first of this last June I was again called to see her. She had been quite moody and silent for some time, and when I saw her had some stomach trouble and fever, took her medicine nicely and talked pleasantly with me. I made several visits at this time, then discontinued them, as she seemed better. Saw her again on the 20th, found her in bed, and from her mother learned the following: Last winter Miss S. had signed the pledge. Several days before she had taken cold, and the mother went to the kitchen and prepared some hot water and only a little whisky, which Miss S. drank. After discovering that there was whisky in what she had taken, and up to the time I arrived, she constantly upbraided herself for breaking her pledge, saying "she had sinned against God; that He would never forgive her." She had gotten into the habit of sitting for hours without saying a word, rocking backward and forward, moaning, clasping and unclasping her hands, and would not at this time let me see her tongue; would make an effort to pull her hand away when I tried to feel the pulse, which, by the way, was at this time about one hundred per minute, while the temperature ranged from 99° to 102° F. I prepared medicine which they were only partially successful in getting her to take.

The next day on driving out to the farm, which I forgot to say was four miles in the country, I found that she also refused to eat. After an immense amount of trouble we gave a rectal enema of milk, beef extract, and whisky. The medicines I used at this time were belladonna, stramonium, hyoscyamus, and gelsemium, the tincture, ten or fifteen drops in a half glass of water. I followed

this line for almost a week until there was a complete failure on the part of any of us to get her to take medicine, or anything by way of the mouth. I now proceeded to give her the medicines indicated with a hypodermic syringe, using the enemas, and occasionally substituting imperial granum for the milk and whisky.

Finding the strength of my patient gradually failing, I concluded to get something into her stomach if possible. One of my friends (Dr. J.) kindly suggested the use of a wooden bit for the mouth, with a hole in the center, through which could be passed a stomach tube. I made the bit out of a piece of walnut wood, fastened to the ends of it straps, that I could pass around back of the head and buckle.

Having prepared over a pint of imperial granum and placed the mixture in a fruit jar, which, by the way, I have found much more convenient than dishes or bowls in this kind of work, I was ready to proceed. We had a terrible struggle to remove an upper set of artificial teeth, but finally succeeded, and placed the bit in position. She would, with her tongue, obstruct the passage of the tube, and after I succeeded in passing it, would compress the tube so as to almost completely thwart my efforts. After trying this plan a number of times, I resorted to a long, large calibre, metallic catheter, bent to adapt it to the throat curve, fastened it to a common bulb syringe, raised my patient up to an angle of about 45°, carefully introduced the catheter through the bit, past the tongue, and

- back against the posterior wall of the pharynx, then down the oesophagus five or six inches. After having everything in readiness we dropped the end of the syringe into the jar and slowly compressed the bulb. In this way I introduced about a pint of the food the first time. There were frequent eructations of very foul gas from the stomach during this operation, which was a success, as I could hear the fluid pass into the stomach.

My medicines were now all given hypodermically. I used the tablets of strophanthus and digitatis, the nitro-glycerine, etc., and occasionally a tablet of the sulphate of morphia.

I mixed my medicines by filling a glass half full of water, dropping into it the remedy. From this glass I would draw into my hypodermic syringe the dose and administer it. I would like to

ask if any of you have ever successfully used a stomach tube (the flexible rubber) on a patient whose every effort is against its use, and on whom an anaesthetic could not be used with any degree of safety?

I would also like to ask as to whether, in your opinion, farm life tends to the development of forms of insanity, especially among the more intelligent of the women, because of the monotony of the life? I find that some prominent writers seem to think so.

In conclusion we may group the symptoms of developing insanity as follows:

A person developing insanity is likely to present a dry, harsh skin; a strange bodily odor; a coated tongue and an offensive breath; a feeble circulation; constipation; headache; sexual disturbance (either abnormally strong, or in abeyance), menstrual suppression in females; deafness or unusual subjective noises; talking to one's self; and, later on, delusions and illusions.

When these signs are supplemented by unusual irritability, moroseness, suspicion, forgetfulness, personal neglect, facial alteration, and a peculiar brilliancy of the cornea, it will be pretty safe to prognosticate that the patient is about to become insane, or that he or she has at least passed over the borderland of *mens sana in corpore sana*.—*Times and Register*.

REPORT OF THE BUREAU OF PAEDOLOGY.

W. C. HASTINGS, M. D., *Chairman*, Van Wert
"The Diagnostic and Therapeutic Value of the Stools in Infants."

T. C. DUNCAN, M. D., Chicago
"Preventable Chest Lesions in Children."

LAURA C. BRICKLEY, M. D., Harrison
"The Care of the Infant, with Special Reference to Clothing."

S. R. GEISER, M. D., Cincinnati
"Infantile Fevers."

STELLA CLARK, M. D., Toledo
"Acute Milk Infection."

W. A. GEOHEGAN, M. D., Cincinnati
"The Throat and Nose in Scarlet Fever."

THE DIAGNOSTIC AND THERAPEUTIC VALUE OF THE STOOLS IN INFANTS.

BY W. C. HASTINGS, M. D., VAN WERT, O.

While in the diarrhoeal diseases of infancy it is a fact that, often as proved by autopsies, there is a great disproportion between the symptoms and the lesions, and, also, that essentially the same symptoms may exist with quite a diversity of morbid changes, yet much valuable information both for diagnostic and therapeutic purposes can be gleaned from a careful study of infantile stools.

It will not be our purpose here to go minutely or extensively into the subject, but only to give an outline of the matter under consideration. The excretions from the bowels of a healthy infant, that is, nursing or fed exclusively on milk, varies in *color* from pale-yellow to a deep-orange. In consistency it is smooth and homogenous, and on account of the presence of lactic acid the *reaction* is acid. The *odor* is slightly sour, but not disagreeable. Mucus, fat, and epithelial cells are present; also bacteria in great numbers. The stools vary in frequency from twice to six times a day. When the infant begins to indulge in a mixed diet their character changes, and begins to resemble more those of the adult. But the changes made by disease will vary the discharge more or less from the normal as above given.

In disease of the intestinal tract the color may become green, varying from pale greenish-yellow to a bright grass-green, indicating either alkalinity in some portion of the intestinal canal or the presence of bile. Bile pigment is not a constituent in health, but is found abundantly in the discharges in catarrh of the small intestine. If animal broth has been used as a food, or bleeding in the upper bowel be present, or drugs like iron or bismuth been given, we will have brown or dark discharges. Bright-red stools indicate an admixture of blood from the lower colon or rectum. While light-colored stools are composed largely of fat or undigested casein, their *consistency* in disease may vary from almost normal to almost nothing but water, owing to the amount of water, mucus, and fat they contain. Watery discharges are regarded as being an unfavorable symptom, while a return to those of greater density is a sign

of improvement. The *reaction* is generally acid, both in health and disease, but may be modified largely by food and medicines. Moreover we find in diseased conditions the presence of mucus which is also met with in healthy evacuations, and should not be considered abnormal until it is present in too great a proportion, when it can be readily discerned by the naked eye. Likewise we often discover the remains of undigested food, epithelial cells, blood and round cells, the latter, if present in very large numbers, are considered as indicating intestinal ulceration. Also bacteria swarm in immense numbers both in health and disease.

In studying the diarrhoeas of infants it is convenient to classify them as being those of acute indigestion, of inflammation, or of chronic indigestion.

The presence of acute indigestion shows itself by the discharges being more or less profuse, at first fecal in character, but containing undigested casein and fat, but later becoming serous and mucus may also be present. They often acquire a greenish tint, and if food containing starch has been taken it can be discovered unchanged in the evacuations.

The temperature will be raised very little, and will soon abate unless this condition passes into that of acute inflammation, when it will persist and the discharges become more frequent. Their character here depends upon the kind and quality of food taken. When mucus is present in the evacuations, as it usually is in inflammation of the intestinal tract, it becomes a very important sign of location of the lesion. Thus when the inflammation is in the jejunum and ileum only, it is very difficult to discover the mucus unaided by the microscope. However, according to Northnagel, if the mucus be stained by bile pigment it "invariably indicates a catarrh of the ileum and jejunum. In such cases also the faeces are usually found to contain epithelial cells and mucus, deeply stained yellow by the bile-coloring matter." When the bile and mucus are most intimately mixed the nearer the disease is situated to the ileum, while if the mucus is in glairy masses or shreddy we will find the lower part of the colon most affected.

If blood be found in the passages we can also form an idea of the location of the lesion from its color and consistency. Thus it

is considered that when it is present in dark, sticky masses, it has come from the upper part of the bowel; when mixed in streaks with mucus and faecal matter it is from the upper colon or the ileum, but when red in color and not intimately mixed with the other intestinal contents, it points to a lesion of the lower colon or rectum. Although from an inspection of the excretions from the bowels we can often determine the seat of the lesion, yet we are often at a loss from that alone to determine whether it has gone on to ulceration or not. Although usually attended with diarrhoea, ulceration is not always so. While blood being present makes ulceration presumptive, yet it is not conclusive, as it may be due to excessive venous congestion of the intestines or other causes. But as one author states it:

"We should suspect more or less extensive ulceration in all cases in which there is a rapid loss of vitality, not to be accounted for by the character and frequency of the intestinal discharges. Also when there is other evidence of tubercular infection, the presence of diarrhoea with much prostration should lead one to look for tubercular ulceration of the intestines."

But in cholera infantum we have a series of symptoms in striking contrast to those above given as indicating ulceration. In cholera infantum the discharges at first being of a pale-green, yellow, or brown color, sometimes in a few hours becomes more and more frequent, and almost entirely colorless and serous, and possessing a peculiar musty odor. At the beginning of cholera infantum the evacuations are usually acid, afterwards neutral, and when serous in character are generally alkaline. Vomiting soon occurs, everything being rejected. The tissues being quickly drained of their fluids, the eyes become sunken, the features drawn, skin cold and clammy.

While the symptoms above given are so much the more violent in character than those attending simple ulceration, yet after death there is a scarcity of intestinal lesions to account for the severity of the symptoms. Accordingly, it has led to the belief that the cause of cholera infantum is of bacterial origin, and "that the symptoms depend upon the absorption from the intestines of the

ptomanies formed by such bacteria, either in the food before it is swallowed or within the body."

The diarrhoeas depending on chronic indigestion are found chiefly among infants that are subjects of some diathetic disease as syphilis, rachitis, or tuberculosis, or are not wisely fed, or where surroundings are anti-hygienic. In these cases the discharges consist largely of food undergoing fermentation, and consequently are offensive. They change frequently in color, and if they become serous it prognosticates evil. Sometimes the patient improves a little, then relapses into a worse condition than before. The emaciation becoming so extreme, and loss of strength so much the more excessive than we would expect from the intestinal symptoms alone, we assign the cause to be essentially due to defective vitality, either hereditary or acquired. While the character of the discharges furnishes but part of the symptoms from which to select a remedy for a given case, yet in most cases it is a better indication of the condition of the patient than many of the other symptoms, or even the number and frequency of the evacuations. It is easy enough after the manner of the old school, to give enough opium and astringents to reduce the number of passages. But harm can only come from such practice. However, while the use of indicated drugs is of great importance, yet far greater are dietetic and hygienic treatment. If we expect to accomplish much with medicines we must see that our little patient has proper food, "little and often," and proper hygienic management, including proper bathing. Likewise we must treat the patient and not direct all our attention to ptomaines and bacteria. Yet if the cause of the diarrhoea be the presence of some indigestible or toxic substance, it is our duty to aid nature in removing it. As Prof. E. M. Hale says in his practice of medicine, "We should aid by colon-flushings, laxatives of a non-irritating nature, like olive oil, castor oil, magnesia, Epsom salts, or congress water. After the foreign irritating or fermenting substance is expelled, then the curative influence of medicine will promptly appear." Let the remedy be selected according to the totality of the symptoms, and I understand that to include the pathological condition present, and the location of the particular

lesion in the case, its cause if known, and all other symptoms both objective and subjective.

In the *diarrhœas of acute indigestion* the following are among the most prominent remedies that will be appropriate: aconitum, belladonna, chamomilla, ipecacuanha, bismuth, bryonia, pulsatilla, colocynthis, nux vomica, antimonium-crudum, and sulphur.

In the *diarrhœas of inflammation* aconitum, arsenicum, ipecacuanha, iris.-verisiclor, merc. solubilis, merc. vivus, pulsatilla, rheum, rhus toxicodendron, and podophyllum, are the remedies the more often indicated.

In cholera infantum, veratum-album, ipecacuanha, æthusa, merc.-dulcis, camphora, argentum-nitricum, arsenicum, caprum, and arsenite of copper will be indicated. The latter remedy, arsenite of copper 2x, has given me the greatest amount of satisfaction when the stools become watery, the thirst intense, great restlessness attended with vomiting cramps and threatening convulsions.

In the diarrhœas depending on *chronic indigestion* the first indication for treatment is for the child to be placed under the best hygienic conditions and to be wisely fed. In addition to the above we have among such remedies as calcarea-phosphorca, calcarea-carbonica, silicea, iodium, sulphur, lycopodium, graphites, hepar-sulphur, mercurius, baryta-carbonica, baryta-iodata, arsenicum, kali-iodatum—remedies with which not only to combat the diarrhœa, but also the particular dyscrasia that may be present whether rachetic, tubercular, scrofulous, or syphilitic.

But there are some chronic diarrhœas, having their seat in the large intestine, characterized by very offensive evacuations, and that seem to owe their origin to certain ferments due to bacteria. Here the treatment should at least be partly antiseptic. Here I have had good results from the use of salol. ($\frac{1}{16}$ gr. to 2 grains) three to four times a day. Napthalin and salicylate of sodium are also used for the same purpose.

INFANTILE FEVERS.

BY S. R. GEISER, M. D., CINCINNATI, O.

Considerable confusion prevails among medical men as to the differential diagnosis of the fevers of infants and children. Prior to 1840 the opinion was predominant that infancy and childhood were immune from typhoid fever, fevers of infants and children being entitled simply "infantile remittent fever." Since that date, however, typhoid fever in children has received considerable more attention, so that the fact is established now beyond a doubt that children can have typhoid fever when young, viz.: before the fifth year. Vogel, for instance, cites seven cases under one year of age; Henoch, eight under two years of age; Mountmollin, fifteen of the same age. The pathological lesions were exhibited, at least in some of these cases, removing doubt as to the true nature of the disorder. Other more recent observers have also seen the disease in young children. Some authors make no distinction between infantile remittent fever, all continued fevers being treated under the title of remittents. While it is difficult many times to draw the line, nevertheless in most cases typhoid can be differentiated from the so called remittents by careful discrimination.

Typhoid or enteric fever has been defined as "an acute infectious disease due to a specific cause," or "to the entrance into a susceptible organism of a specific infecting principle," this infecting principle or agent being the bacillus described by Eberth. From this definition we may infer that something more than the bacillus is necessary, viz.: a susceptible *organism*. Just under what conditions the organism is susceptible is not yet known. Liebermeister says, "there is not a single symptom of enteric fever which can be characterized as pathognomonic. If that is so, should it be surprising that it is difficult to diagnose the disease? While enteric fever is rare in infancy and childhood, it is oftentimes not recognized when it does occur. The onset, in most cases, is so insidious that it will take a number of days before a correct diagnosis can be made with certainty. The fever is apt not to present a typical course at the beginning on account of so many causes influencing the temperature of a child that would not affect an adult. The

fever may be moderate or reach a high point early. The typical temperature-range of Wunderlich is not usual in childhood.

How, then, to diagnose a case of typhoid or enteric fever, is the question?

Continued fever, rose spots—appearing about the eighth day, perverted bowel action, constipation or diarrhoea (usually the latter), plus an apathetic expression are almost positive symptoms of enteric fever, regardless of age. Tubercular meningitis, simple diarrhoea, and enteritis during the early stage may sometimes have to be differentiated. In tubercular meningitis we have irregular pulse and breathing, altered pupils, stupor, and likely convulsive movements and not much temperature. Simple diarrhoea and enteritis also have little, if any fever. The latter has green and painful stools. The diarrhoea in enteric fever is painless.

The condition of the tongue is also of diagnostic value. While the tongue does not have, in all cases, the redness which adults usually have, nevertheless the tips and margins are red, while the major part may be heavily coated. Again, a V-shaped reddish appearance may be found in the center of the organ.

Tympanites, ileo-coecal tenderness or gurgling, so much relied upon as diagnostic of this disease, is of not so much value as it can be found in other intestinal diseases of children. As a rule, the severer symptoms common to adults fail to manifest themselves. On the whole, the types and varieties do not differ materially from those of adults. The duration is usually shorter because the tendencies in childhood are more toward growth and repair than in the adult, whose nutritive functions are employed in repair alone. The prognosis also is better in children because they usually have healthy organs and consequently have fewer complications. Those who die of enteric fever, die, as adults do, of perforation or exhaustion.

Management—As a rule the gravity of the case is gauged by the height of temperature. The higher the fever the greater the danger is generally supposed to be. My experience in the management of enteric fever has taught me that this is not the rule in many cases. Children with high fever oftentimes make excellent recoveries, and *vice versa*. I have in mind several cases that had

a temperature of 105 to 105 $\frac{1}{2}$ ° F., every afternoon during the second week of the fever, then during the third week gradually declined, and the patients made rapid recovery. The only case that took a fatal issue during the past winter was one whose temperature only once reached 108, and afterward was never above 102° F. So long as the patient is otherwise progressing favorably, the temperature ought not to worry us very much. By all means do not knock it down with antipyretics or the Brand treatment.

Hydortherapeutics is a good therapy if properly applied, internally, by washing out the products of fever, and thereby lowering the temperature, and externally by washing off the secretions, and also lowering the temperature. Sponging the patient with tepid water, or equal parts of water and alcohol, reduces the temperature, relieves insomnia and restlessness. Fever is one of nature's methods of disposing of the infection, and of morbid products, consequently, so long as these are present fever will prevail, despite the heroic methods of medication. It goes without saying that a child with enteric fever should be in bed, and restricted to fluid diet so soon as the disease is suspected. These are two cardinal points of treatment and they should be absolute.

The article of diet containing every necessary constituent for the nutrition of the body is milk. Some cases, however, receive more milk than the system can use. Undigested masses of caseine are sometimes responsible for the persistence of fever. Examine, therefore, the dejections carefully, and if curds are found give less milk or discontinue altogether and substitute meat or oyster-broth or juices of rare meat. The white of egg with water, and a little sugar is nourishing and usually relished. It is a "fatal error," however, to give in too rapid succession varieties of food even in the liquid form. I think the secret of success in the management of fevers, lies largely in proper feeding and cleanliness. A good dietetist is to be preferred to a "good prescriber" in this disease.

Medical Treatment—If there is headache, which is indicated by the child burrowing its head in the pillow, picking or rubbing at its head, ears, or nose with much moaning, starting, heat of the head, red and painful throat, with symptoms of cerebral congestion, as furious delirium, etc., belladonna will be indicated.

When there is much prostration, loss of appetite, clean tongue, clear mind, and occipital headache, during the first stage, gelsemium will benefit the case, whether it be enteric or remittent in character. In *sthenic* cases, bryonia will exert a beneficial influence, while in the *asthenic*, rhus will be called for, especially during the second week, with pains in the back and lower extremities, restlessness and dry brown tongue. A tympanitic abdomen, dry, red tongue and diarrhoea are symptoms that are met by teribinth.

Other important remedies for the diarrhoea are aloes, china, podophyllum, phosphoric acid, merc. cor., and arsenicum. Muriatic and nitro-muriatic acid are also of great value in this disease.

DISCUSSION.

DR. BAXTER—Notwithstanding the lateness of the hour, I want to endorse some of the statements made in that paper. What Dr. Geiser has said of typhoid fever in children is also true of the disease in adults. Temperature is not a safe guide alone in typhoid fever. The high temperature does not necessarily indicate danger nor does a low temperature indicate that the patient is doing well. All the symptoms must hold together, otherwise not one symptom can be used as a guide. I had one case in which this was impressed upon me. A young man in the third week began to drop slowly on the temperature but still the patient was not doing well, and when the patient's temperature indicated 100 and 101 he died. The temperature is not a safe guide in typhoid fever in children nor adults.

DR. WUNDERLICH—I was just thinking how he said that formerly we used to call it more intermittent fever. My own experience has been something like that. This winter has been the first time that I have had genuine typhoid fever in small children. I thought it might be just the same as in grown folks. It has taken more different forms in typhoid fever now than in former times.

DR. GEOHEGAN—One or two words in regard to typhoid fever. I have had a little experience that was somewhat unique. Of typhoid fever in infants, I have had four cases, and I think possibly a fifth case in children under two years of age. In two of those cases both of which had been diagnosed early in the disease, that is before the end of the first week and which followed the usual course of typhoid fever. We had intestinal hemorrhage in one, perforation and death. The diagnosis of typhoid fever in infants

has always been open to question. The occurrence of hemorrhage in cases that have been diagnosed as typhoid fever, certainly strengthens and confirms the diagnosis. One of these cases occurred in a patient of nine months of age. The early symptoms were those of meningitis, my consultant and I so diagnosed it. At the eighth day gradually the symptoms seemed to clear away, and I felt warranted to changing the diagnosis to typhoid fever. The course was that of typhoid fever. On the eighteenth and nineteenth day we had copious hemorrhages from the bowels, a condition approaching collapse, and it was with great difficulty that the patient was saved. One other case of two years terminated fatally from perforation. There was one point in the diagnosis which I think is of importance that the doctor did not mention, the trouble with which they are most frequently complicated is enteritis or entero-colitis. That is where the marked difficulty, not always by any means, is to be found, but if found, is of great diagnostic value. In typhoid fever the fever and indisposition of the child precedes the bowel trouble. Another thing of importance is that typhoid fever occurs most in bottle-fed children.

THE THROAT AND NOSE IN SCARLET FEVER.

BY W. A. GEOHEGAN, M. D., CINCINNATI, O.

The angina of scarlet fever is one of the most characteristic symptoms. It is almost invariably present even when no eruption can be detected upon the skin, and in such cases offers the only basis for a diagnosis. The throat is usually of bright-red color, with numerous small punctate spots. The inflammation may be so slight as to cause little inconvenience, or so severe as to render swallowing almost impossible and the pain excruciating. It may be finally catarrhal or so intense as to cause necrosis of the mucous membrane and even of the deeper structures. In the more malignant cases a pseudo-membrane forms upon the tonsils and adjacent structures, resembling in many respects diphtheria, from which it is of the utmost importance to diagnose it. In scarlet fever the membrane is of yellowish color, often in marked contrast to the grayish-white deposit of diphtheria. Like the latter disease, the membrane cannot be removed without leaving behind a raw and

bleeding surface. It cannot be detached in continuous shreds, as in diphtheria, and does not tend to form again, but leaves an ulcerated and freely suppurating surface. The slough itself is infiltrated with leucocytes, and undergoes molecular disintegration, rarely separating spontaneously in mass. The morbid process extends more into the depth of the tissue than by continuity of surface, and hence involves the eustachian tube and ear, and the deeper structures of the throat rather than the larynx. It may lead to capillary bronchitis, or even lobar pneumonia, but this is not due, as sometimes occurs in diphtheria, to extension of the membrane, but rather to the inspiration of irritating and septic matter. It may cause purulent inflammation of the nasal mucous membrane, with profuse, excoriating and offensive discharge, but not as a pseudo membrane extending to the anterior nares. The scarletinal membrane seems to be due to streptococci, and if the presence of the Klebs-Löffler bacillus be accepted as a necessary concomitant and absolutely diagnostic of diphtheria, then bacteriology offers us the best criterion for the differential diagnosis. True diphtheria does sometimes occur as a complication of scarlet fever, especially if diphtheria is epidemic in the locality, but such cases are much less frequent than formerly supposed. The membrane, when due to diphtheria, forms later in the course of the disease than when purely of a necrotic character. The adenitis caused by scarlet fever differs from that due to diphtheria in being more inflammatory in its character, with more redness and swelling, and a greater tendency to suppuration and gangrene.

The throat lesion is responsible for the majority of the ear complications of scarlet fever, either by direct extension of the inflammation and necrosis, or by occlusion of the post-nasal space, by the inflammatory thickening of the membranes, and accumulation of secretions, and the consequent regurgitation into the eustachian tubes.

The throat symptoms may be greatly modified by the usual internal remedies, belladonna, apis, cyanide, and biniodide of mercury, lachesis, and phytolacca, but they may be greatly assisted, and often complications prevented, by proper local treatment. It is of the utmost importance to keep the nasal cavities free from

accumulations of the secretions, and to remove when possible the bacterial action. This may be accomplished by means of sprays or douching. An atomizer with a coarse spray may be employed, but far better are Dessar's cups, by means of which liquids may be poured without undue pressure into the nasal cavities. In young children an ordinary dropper may be used. Syringing is very efficient but is more likely to result in injury to the ear. All liquids used in cleansing should be heated to the temperature of the body. Warm water is of itself of great value, but alkaline fluids seem to aid in liquifying the secretions. Two drachms of common salt or three drachms of bicarbonate of sodium, borax, or boracic acid are excellent injections. Seiler's tablets have been recommended, but are not superior to the solutions mentioned. The nose should be cleansed every three to six hours. It is often advantageous to follow the injections by a spray of alboline or vaseline, or a little vasaline with two or three per cent. of boracic acid, may be placed within the nares.

Thorough disinfection of the nasal and naso-pharyngeal cavities is very difficult to accomplish. The use of bichloride of mercury solutions, if of sufficient strength to be effective, is almost certain to cause mercurial poisoning if long continued. Hydrogen dioxide, diluted with four or five times its bulk of water, combines efficiency with safety. It may be used as a spray or as an injection. As an application to the throat the insufflation of a fine powder composed of one part of permanganate of potassium and five parts each of sugar of milk and gum arabic, as recommended by Goodno in diphtheria, will prove serviceable. Careful attention to these details will materially reduce the complications of this dread disease.

DISCUSSION.

DR. STEWART—I would like to emphasize the importance of giving attention to the nose and throat in scarlet fever and measles. I do not believe I have anything to add to the line of treatment, but being a specialist, and seeing a great many of these cases, I necessarily come in contact with cases that have been neglected during their convalescence or during the progress of the disease.

Cases that have become incurable, and that could have been saved ear complications had the cases been treated during the progress of the disease along the line suggested by the author of the paper just read. It is understood, of course, that every case of scarlet fever and measles is not complicated by throat lesions; examinations are necessary, however, to determine this point.

DR. T. P. WILSON—If local applications in disease are allowable at all, the cases set forth here are in point, because if attention be given to the nose and throat we are far less liable to have that undesirable trouble, otitis media, which is so liable to follow and which is principally the product of inattention to the obstructed condition of the ear, and the accumulation of poisonous secretions about the openings of the eustachian tubes and of the secretions in the nasal cavity. I would highly commend the points raised by the gentleman in taking constant care of those parts, provided they are involved; but of course a great many cases of scarlet fever occur in which there is no need of any such attention at all, and if it should be taken for granted that all cases, or nearly all cases, required any such attention we would go far of the mark. I want also to commend the model article by Dr. Geiser. Every paper should present something new. Taking it for granted that each practitioner has known his pathology as well as Dr. Geiser points it out to him, you may take the cases as pointed out by him and you will discover that although his discrimination between infantile and adult fevers is very nicely done, yet upon the whole there is the same great fact, that, after all, he is obliged to fall back upon the symptomatic indications. His supposition that it is a typhoid ulceration of the bowels, or of anything else, can not be confirmed except by post-mortem. We have a class of men in our own school who are quite largely pathologists, but we should know whatever is symptomatic of disease. They don't go an inch forward in the correct mode of treatment. You have got to stand by the symptomatic indications to get your true treatment, and that Dr. Geiser seems to do.

DR. GEOHEGAN—I did not intend to convey the impression that every case of scarlet fever ought to be treated in the way indicated; but we are to take only the more severe cases and treat them in the fashion I have indicated in order to prevent the troubles I have mentioned, we will have made some very serious mistakes before we have gone along very far. A mild case in one child with a closed nostril, is more dangerous with a child with enlarged nostrils in a severe case. I think it would be safe to glance into and cleanse the nose in every case. We all know that in very many cases in which there has been very little complaint about the

throat, that these cases are often followed by inflammation of the ear, and I do believe that proper cleansing in all these cases will prevent it.

THE CARE OF THE NEW BORN WITH ESPECIAL REFERENCE TO DRESS.

BY LAURA C. BRICKLEY, M. D., HARRISON, O.

Could Mother Eve have realized the enormous amount of labor and misery she was entailing on her descendants when she first awoke to the knowledge of the fact

"That she had nothing to wear,"

she would have hesitated before gathering those leaves and trying to improve upon nature. She took the first stitch in our garment of slavery, and every woman since has added another stitch, until life is simply a struggle to outdo the "Lily of the Field." Even baby's covering means several months of work before its advent, and upon its arrival what a getting together of linens, flannels, and starched frocks, for the little innocent who has known naught but softest environments. It has always my sympathies on having its first toilet made. I have never yet put on the first dress without a mental apology to the little dear, realizing of what a source of trouble this is the beginning. But as custom demands clothes, clothes there must be, as well with infants as with all of us.

That there are entirely too many clothes for baby thought necessary, we need only consider the squaw and her papoose, whose wardrobe is conspicuous by its absence. We civilized mothers could well take pattern, and make baby's life more comfortable as well as our own. There is as much need of reform in infancy as later in life; perhaps therein lies the one practical point in the dress reform we hear so much about. As Wendell Phillips says,

"Begin a hundred years before a child's birth to make it,"

answers here as well as elsewhere, and we M. D.'s. would have less work, and poor humanity a better chance to enjoy the beauty all around.

Upon the arrival of the little one, after the cord is attended to (Dr. Sander's method), it is well oiled with sweet or olive oil or lard wrapped in an old soft piece of muslin, and then well covered with a shawl or blanket. Then it is given to the mother to be nursed, after which it is laid beside her on a pillow of its own, and *let alone* until it becomes adjusted to the new order of things.

As they generally make their appearance at the witching hour of midnight, and on the worst night of the week, they are not disturbed until next day, when they are bathed and oiled. Then a skirt and dress is added. When possible the clothes should be made to hang from the shoulders. One skirt is then all that is necessary, and should be made to open down the front, as they are so much easier handled. I saw an advertisement that seemed to solve the question of "How to keep Baby covered at Night." It was a gown with a draw-string in the bottom, and under the picture were these lines :

"Baby may kick, Baby may squirm,
Baby may toss, Baby may turn,
But she's covered."

When people learned that I did not have my babies washed I was put down on their black list, but when my little ones thrived without any mishaps they said :

"Well, it may be all right, but I always washed mine, so did my mother and grandmother, and you had better."

I am always careful to look after the bands, when they will insist upon using them, to see that they are not too tight, also see that it is not kept too warm, and is given plenty of fresh air and an occasional drink of cold water.

The clothes should not be over twenty-seven inches long, as a long dress and skirt are as much out of place on a baby as on a woman in the street.

Upon each visit baby is overlooked to see if it is clean and comfortable. If you can persuade the mother to fuss as little as possible, to "let it alone," keeping it in as near the natural position as possible, her life will be less a burden, and our slumbers will be

undisturbed when the thermometer is 15° below zero and a ten mile drive does not seem to be the thing most conducive to our comfort.

PREVENTABLE CHEST LESIONS IN CHILDREN.

By T. C. DUNCAN, M. D., PH.D., LL.D., CHICAGO, ILL.

I wish to emphasize a few practical points in infantile pathology and therapeutics.

1. Growing pains or leg ache in children is a form of rheumatism, and is usually met in children who live principally on milk. It is a myalgia, and finds its remedy in pulsatilla, or, perhaps, rhus. Sometimes the tendons are involved, and rarely the joints; but should the fibrous matter suffer so much stronger is bryonia indicated, and also so sure are we to have the heart involved. Sulphur and calcarea phos. were remedies Grauvogle found would prevent the development of hydrocephalus; which is often due to lactic acid poisoning and obstruction of lymphatic glands. These remedies should not be overlooked in this form of rheumatism. Remember also kali carb.

2. Another chest lesion that is preventable is the acquired, if not congenital, hypertrophy of the heart. The muscular development of some children is very deficient. They lack the potash elements that ensures good muscle. Corn-meal, beans, peas, potatoes, brown-bread, and rye, should enter into the weekly dietary of growing children, and particularly in those who do not grow as rapidly as others. A whimsical child is usually poorly nourished. In the teens the athletic sports call for a muscular activity and strain that often wings a feeble heart.

3. Chronic bronchitis in a child is to me a source of great concern. It tells me of a defective absorbent system as well as a sensitive nervous energy. Proper food and sulphur should cure.

4. To prevent consumption we should begin during antenatal life. The true physician grows alarmed at the steadily increasing mortality from tuberculosis. The older physicians can recall the time when phthisis was not often met with. In Massachusetts

about one-half of the cases physicians treat are consumptives. The per cent. is not so large in this State, but it is increasing—increasing from year to year. I believe that the prevention of tuberculosis is in a proper development of the lymphatic system; therefore, we should give attention to *its* food. Feed the lymphatics wisely.

In calcareous sections, where the milk, water, and food are loaded with lime salts, sulphur, or its vegetable substitute, lycopodium should be given during gestation as well as during subsequent child development. If, however, the lime salts are deficient then the natural lime salts (carbonate of lime, phosphate of lime, carbonate of magnesia, etc.), should be given either in the food, or drink, or both.

Waukesha water contains lime and magnesium. Oysters contain carbonate and phosphate of lime.

If more attention were given to the food of the mothers, we would have a better developed class of children who would escape the chronic chest lesions so often met. If half of the attention now given to improving the breed of cattle and horses were given to the physical and mental development of children, we would in time see a greatly improved race of people.

Environment, food, and training have greatly improved the hereditary bias, but in the future more attention must be given to medical chemistry; physiological, pathological, and therapeutic chemistry of man.

ACUTE MILK INFECTION.

BY STELLA M. CLARKE, M. D., DENVER, COLO.

In looking over statistics one is impressed by the alarming mortality from intestinal troubles during the hot summer months. Over sixty per cent. of the deaths reported being from bowel trouble, and of these ninety-five per cent. are in children under three years of age.

Many theories have been advanced and much discussion followed as to the cause of these summer diarrhoeas, but the one most

generally admitted is that the trouble is largely due to the growth and multiplication of bacteria, and the formation of chemical poisons by these low forms of vegetable life. Improper food or over-feeding, by taxing the delicate digestive organs of a child, may induce a diarrhoea although there may be no micro-organisms present, yet the lowered vitality in such cases affords an opportunity for the multiplication of bacteria that does not occur under normal conditions. Indigestible substances by their irritation may induce diarrhoea by increasing the peristaltic action of the bowels.

It has been shown that in the infant intestinal, digestion is of greater importance than the stomachic digestion, that organ being more for the reception of milk and its coagulation than one of its digestion. Hammarsten proved this true in the case of puppies and rabbits, while Hofmeister has shown that the stomach does not absorb soluble substances as quickly as do the small intestines. Dastrè proved that milk sugar is digested by a ferment found in the mucus of the small intestines, while the absorption of fat is due to the action of the pancreatic juice and the bile. Zweifel states that the proteolytic activity of the pancreatic juice is well developed at birth. Koplik, in a recent article, says the amount of peptone proved to be present and formed in the infant's stomach has been found infinitesimal, though undoubtedly present, and that Epstein, Randnitz, and others assumed, as fast as peptones formed they passed out of the stomach. That in the infant the principal role in digestion is probably played by the bowel, and this is in conformity with experiment of Von Noorden. The stomach plays but an introductory role in furnishing its ferments, and causing preliminary preparation of casins. Thus we see that digestion being largely, if not entirely accomplished, in the small intestines; indigestion in the infant must necessarily induce readily a diarrhoea. From studies made by Baginsky, Siebert, Meinert, and others, we are led to believe that atmospheric conditions do not play an important part in the etiology of these troubles, as far as barometric pressure, humidity, and rain-fall are concerned. Yet Vecher states in his study of the mortality rate in London, covering a period of twenty-five years, that the highest death rate from

diarrhoea has been when the average temperature has been 60° F. or beyond.

We are often too careless in our diagnosis, and call every severe form of infantile diarrhoea cholera infantum. It is a mistake. Those cases which arise from indigestion, overfeeding, etc., should be classed under the head of intestinal indigestion or simple diarrhoeas. The class of cases to which I wish to call your special attention is fortunately not so common a disease. Choleriform diarrhoea, cholera infantum or acute milk infection, "a disease due to a toxicogenic bacteria, not a specific organism, perhaps, as in diphtheria or tuberculosis," but any one or more of a class of germs may be present, and, under certain favorable conditions, produce a diarrhoea. Both Booker and Escherich have made studies of the bacteria in these diseases agree that no specific organism has been found, though Booker reports the isolation of thirty kinds or more. The proteus group have been found in at least fifteen out of nineteen cases of true milk infection. Escherich has shown that during foetal life the intestinal contents are sterile, but within a few hours after birth bacteria find their way into the intestinal tract. As long ago as 1866 Breslen proved that the meconium was quickly infected from the air which the child swallows immediately after birth. The meconium contains two distinct species of bacilli and a micrococcus. One of these bacilli, known as the head bacillus, is a round, glistening spore; the other is thought by some to be identical with the bacilli subtilis. These entirely disappear with the last passage of the meconium. An examination of the faeces of milk-fed children show it to contain a larger number of bacteria than the meconium and more than the faeces of healthy adults, but of greater similarity instead of the manifold variety of the later. Two species are constantly present, one of them so predominating as to be found almost as a pure culture. These two species are known as the "obligatory milk faeces bacteria," and are the bacterium lactis aerogenes, and the bacterium coli commune. Several other forms are found, but without any regularity, and are known as the potential milk faeces bacteria. The upper part of the duodenum is quite free from these little organisms, but lower

down the small intestine contains the bacterium *lactis aerogenes* while the lower part of the ilium contains the bacterium *coli commune*, which increase in number throughout the entire length of the colon.

These bacteria are pathogenic to some of the lower animals, even causing death; whether they develop pathogenic properties in a diseased condition is a question not fully solved, although Bouchard thinks that the intestine contains a highly poisonous substance, and estimates the formation of poisonous alkalooids in the intestines of a healthy adult enough to kill, if all were absorbed, and that these poisons are probably due to bacteria normally present. During the summer diarrhoea of infancy the intestinal contents abound with many species of bacteria. As has been shown, some of these bacteria produce powerful poisons, and will multiply out of the body abundantly when the atmospheric temperature reaches 60° F. or higher. No better culture medium is known than milk, and this is the food with which they find their way into the intestines of the child. And it is a demonstrated fact that these diarrhoeas are almost entirely limited to artificially-fed children. These germs grow and multiply in milk both before and after it is taken into the alimentary tract of the child, and produce poisons, which, proving intestinal irritants, induce diarrhoeas and the accompanying symptoms. The number of the poisons may be as great as the bacteria, but all are gastro-intestinal irritants.

Some of these poisons have been isolated, and their effects on the lower animals studied. Tyrotoxicon, one of the most powerful poisons, first found in cheese, later in ice cream and other milk products, was isolated from milk, part of which had been given to a healthy child and had induced severe vomiting and purging. This poison has induced death when given in sufficient quantities; the autopsy showing the mucous membranes of the small intestine bleached and softened, changes identical with the conditions found in post-mortems after choleric diarrhoea. In 1890 Vaughan isolated proteid poisons from toxicogenic germs, found by Booker in the intestines of infants suffering from milk infection. These proteids were highly poisonous, and when injected subcutaneously into kittens or puppies caused severe vomiting and purging, and

even collapse and death. The post-mortem showed the intestine pale throughout, and constricted in places; the heart in diastole and filled with blood. Vaughan further states: "A small amount of the proteid from bacilli dissolved in water was injected under the skin of a kitten; within one-half hour the animal began to vomit and purge, and death occurred within eighteen hours. The small intestines were pale, contracted in places, and contained frothy mucus. The stomach was distended with gas, and contained mucus yellow with bile; the liver was normal; the spleen and kidneys congested, and the heart distended. Another kitten was treated with proteid from bacilli. The vomited and fecal matter was green. Death occurred in fifteen hours, and the post-mortem revealed changes identical with the first." Baginsky isolated cultures from the white liquifying germ obtained from diarrhoeal stools, a poisonous proteid, which produced in mice, after five hours, dyspncea, sluggishness, and apathy. This increased till death occurred after two or three days, the post-mortem showing congestion of the spleen, liver, and peritoneum, the intestine being hyperæmic its entire length. The bacteria isolated from diarrhoeal stools do not multiply in ordinary hydrant water, and lose their power of development a short time after being placed in it. All varieties, however, grow and thrive in milk, producing important changes in milk. Some cause coagulation with acid reaction, some render milk acid without coagulation, others alkaline without coagulation, and still others change slightly acid milk into alkaline, and then coagulate with alkaline reaction. Some varieties cause milk to become a transparent fluid, while others coagulate and then render it transparent.

Acute milk infection of cholera infantum is, fortunately, not as common a disease as that of milder type, and occurs almost without exception in artificially-fed children, though rarely breast-fed children may, from their creeping about the floor, and their bad habit of sucking everything they can lay hold of, become infected. Holt thinks that cholera infantum usually follows a mild form of diarrhoea; but Christopher believes it comes more often in previously healthy children. My own experience has led me to agree with Holt. Certain it is that an alimentary tract, where imperfect

digestive changes have set up fermentation, and more or less irritation, would prove the most susceptible to any further irritant. The symptoms may develop as rapidly as if a poisonous dose of arsenic had been given. Among some observers the opinion has been advanced that cholera infantum is identical with thermic fever ; there may be no resemblance between the two. Great heat of head, contracted pupils, thin fecal evacuations, scanty urine, embarrassed respiration, and cerebral symptoms towards the close of cholera infantum are prominent conditions in thermic fever. The rectal temperature runs high in both, often from 105° to 108°. However, in choleric form diarrhoea the patient is wide awake, restless, suffering from intense thirst, while in sunstroke the drowsiness and stupor supervenes at once, cholera infantum may come on at any time, day or night, while thermic fever occurs only during the hours of extreme heat.

J. Lewis Smith, in his report of an examination made by Wm. H. Welch, of John Hopkins Hospital, says, regarding the pathological conditions found after cholera infantum :

" There was undoubtedly evidence of acute inflammation, there was an increased number of leucocytes in the mucus and sub-mucus coats. This accumulation of new cells was abundant in and around the solitary follicles, which were greatly swollen. Clumps of lymphoid cells were found extending even into the muscular coat. The epithelial lining of the intestines was not demonstrable, but this is usual in post-mortem of the human intestine very soon after death and justifies no reference as to pathological changes. The glands of Leibekuhn were rich in so-called goblet-cells and some of the glands were distended with mucus and desquamatal epithelium so as to present almost the appearance of small cysts. This was especially true in the neighborhood of the solitary follicles. The blood vessels, especially in veins of the sub-mucus coat, were abnormally distended with blood, micro-organism were found in great abundance upon the free surface of the intestine, in the mucus accumulations there and in the mouths of the glands of Leibekuhn. Both rod-shaped and small round bacteria were found. In autopsies of other cases of true cholera infantum no signs of inflammation were present, though the intestines looked bleached and softened."

Symptoms—The child, which has been perfectly well, or perhaps suffering from a mild form of indigestion, is taken suddenly with vomiting and purging, the color leaves the face and a deathly palor ensues, the features look pinched and the mouth drawn; the eyes sink in their sockets, the nausea, vomiting, and purging may be almost incessant. The thirst is intense and the child drinks eagerly anything that is offered. The patient is restless, cries and moans, is peevish and fretful; the symptoms of irritation may go to a stage of excitement, but finally the child sinks into a comatose condition. The stools at first are green, brown, or yellow; acid or neutral in reaction, thin, watery, and profuse and contain faecal matter. They may be almost odorless, more often there is a peculiar musty odor, or they may be offensive, sometimes to an extreme degree. The vomiting and purging increase with food or drink; paralysis of the vaso motor nerves of the intestine occur and the stools contain mostly blood-serum and are alkaline; white in color, the typical rice-water stool. The number may be as high as thirty, or even forty or more in twenty-four hours, or as the sphincter becomes relaxed, occur every few minutes. Microscopically they contain epithelial cells, round cells, and immense numbers of bacteria. The pulse is small and feeble, respiration embarrassed, urine scanty or suppressed. The skin is cool and clammy, but the rectal temperature is from 102° to 105° F., and may rise just before death to 107° or 108° F.; the flesh rapidly disappears, and there is no disease in which the wasting and exhaustion are so rapid, excepting Asiatic cholera. Vomiting and purging may suddenly cease, but the child is not better as long as the stupor continues. As the disease progresses and the vital powers fail, the contracted pupils no longer respond to light, the skin becomes more cold and clammy, the pulse more feeble, stupor more profound, and often convulsions close the scene. Even when the pulse becomes stronger, the stools less frequent, and the nervous symptoms improve, one must remember the possibility of relapse and vigilance should not cease till the child is well. Cases of acute milk infection either terminate in death or marked improvement occurs in from one to three days. Many cases will improve only to suffer relapse, or improve to a cer-

tain point and there remain for days in much the same condition. Sometimes the irritation set up induces an entero-colitis, and should then be treated as such.

Prognosis—The prognosis is bad, these are cases of poisoning, the vital powers are rapidly depressed, and the exhaustion is extreme; the younger the child and the hotter the weather the less hope. Cases in which diarrhoea has existed for some time and the vitality lowered or intestinal inflammation already present afford the least hope. No case, however severe, should be despaired of, though, in fatal cases, the physician is cruel who assures the parents the result would have been different had he been called earlier.

Treatment—As stated before, these are cases of acute poisoning and demand as energetic treatment as would a case of arsenical poisoning—no time must be lost. The first thing to do is to get rid of the poison, which means the prohibition of milk, even breast milk will afford a culture medium in the intestinal tract of the child; forbid every drop, and *this prohibition must be absolute*. The case is one of poisoning and must be dealt with as such. It follows, then, that elimination is imperative. Watch nature—she is trying by the vomiting and purging to get rid of it, but her efforts are unsuccessful; she needs assistance. Wash out both stomach and bowel immediately. Warm water and Castile soap, or salt and water, a teaspoonful to the pint should be used. There is no danger of injury to the bowel if properly done. Use a soft flexible catheter. Experiments prove that it is almost impossible to rupture a bowel with water, before that is done the sphincter is relaxed and the water expelled, or it escapes through the ileo-caecal valve into the small intestines. After the bowel has been washed Gross recommends tannic acid injection. Vaughan uses grs. xv.—xx to the pint. As some of the poisons formed are soluble proteids, they are precipitated by the tannin and rendered inert should any have remained after the intestinal irrigation. The stomach should be washed with warm salt water, a teaspoonful to the pint. This will not exhaust the little sufferer one-half as much as the incessant vomiting. The fact that the child is relieved for some time of both vomiting and purging, and often sinks into a quiet slumber, is sufficient evidence of the benefit derived. Many physicians recommend

an intestinal antiseptic, as salol or mild chloride of mercury. The mercury being especially recommended for its anti-fermentive action, and to reach the small intestines which are inaccessible to irrigation. One dose of grs. ij or iij being given. I have not used it in this way, but it seems most rational treatment, and as the case is one of poisoning, why not use every means to antidote it. Others report success with minute doses, repeated every half hour. It seems to me, however, that the case requires energetic treatment at the start. Antidote the poison first, then relieve any remaining condition with the indicated remedy. What would we think of a physician, who, when called to a case of arsenical poisoning, would say, "the symptoms are not alarming, I will call later, and if necessary then, I will wash out the stomach and give an antidote?" A few hours may be too late for an antidote. There is no time to waste in a case of acute milk infection, if antidoted, it must be done at once. I call to mind a case which I was called to see; there was some objection to a trained nurse; it was late and I was hurried with other calls, so I gave the indicated remedy, assuring myself that I would have more time in the morning and would then irrigate or insist on a nurse who could do it, but by morning it was too late and my patient beyond all help, dying less than twenty-four hours after the first symptoms occurred. I believe I lost the one chance by not being more prompt. After irrigation the thirst may be quenched by sterilized water, cooled by packing it in ice, and to which a small quantity of whisky has been added, or hydrochloric acid 0.1 per cent. may be added. I have much success by following McConnell's method of giving all the hot water the child will take through a nursing bottle, to the exclusion of everything else, for twenty-four hours. After that albumen water, made by beating the white of an egg with double the quantity of water, adding a little sugar, and, if desired, enough whisky to flavor, or cold mutton broth, from which the fat has been removed, may be given; rice or barley water, or arrow root, is usually well tolerated and supply the carbo-hydrates.

A return to milk diet should not be made for several days, and then with caution, giving it in small quantities, well diluted and sterilized. Pure fresh milk is, perhaps, the better food, as steriliza-

tion destroys the nucleus of its vital properties, but the question is not are you giving it the best food, but are you giving it a poison? Gerard Smith advises in the sterilization of milk heating it to a lukewarm heat for an hour, then raise it to a heat of about 150° F. for half an hour, first maturing the spores and then killing the bacteria, as it is much easier to destroy the developed bacteria than to kill the spores, but I do not believe that is sufficient heat. According to Koplik and Hueppe sterilization is not perfect even with a heat of 212° F.

When the temperature rises to 103° the ice-cap may be used, and often relieves the restlessness and moaning. Frequent sponging in cool water, with friction, is of advantage. The bowels should be covered with flannel, or compresses wrung from hot whisky may be applied, and a band used to hold them in place. Plenty of fresh air should be given. The child may even be carried in the open air and swung in a hammock. In cases of collapse hot mustard baths and friction may be used. Holt advises the hypodermic use of atropine, the $\frac{1}{500}$ of a grain as a heart stimulant. Meinert recommends the intravenous injection of a $\frac{6}{10}$ per cent. salt solution in extreme cases. Irrigation and stomach washing may be repeated whenever the vomiting and purging returns. Stimulation needs to be used from the first. The bowel discharges and soiled clothing must be disinfected, as should the hands of the nurse.

In taking the position I have in this paper I am aware that it may meet with criticism, but I believe it is correct treatment that the case, being one of poison, demands rational treatment; that by antidoting the poison we are truly homeopathic. Of course the indicated remedy must follow the other treatment, and among the first to be thought of is arsenic. In this remedy you find a perfect picture of acute milk infection. Whether the remedy acts by antidoting the poison I cannot say. It has a marked action on the composition of the blood, on the nervous system, and the mucous membranes. It has the rapid failure of vital powers, the malignancy as shown by the darkened color of the blood, the prostration and disordered nervous system, the fetor of its excretion and exudates, the restlessness and anguish, and the great thirst. With it I call attention to the white hellebore, veratrum album. This act

ing through the cerebro-spinal system effects nutrition; the blood becomes disorganized and separated into its constituents; the circulation is embarrassed, and a general torpor of the vegetative nervous system occurs, giving rise to true choleraic conditions, general coldness, prostration, collapse, copious watery vomiting and purging, spasmodic colic and profuse cold, clammy perspiration. *Aethusa* is a remedy highly recommended by *Guernsey*. The intolerance of milk being a prominent symptom. Among other remedies to be thought of are bichloride of mercury, bromide of camphor, ipecac, bryonide, and belladonna.

BIBLIOGRAPHY.

Ptomains and Leucomains—*Vaughan*.
Diseases of Children.—*Smith*.
Intestinal Bacteria of Children.—*Booker*.
Diarrhoeal Diseases.—*Holt*.
Nutrition of Infants.—*Koplik*.
Infant Feeding.—*Gerard Smith*.
American Text-book Diseases of Children.
Cyclopædia of the Disease of Children.—*Keating*.
International Medical Annual.
Hughes' Pharmacodynamics.
Bacteriology.—*Senn*.

REPORT OF THE BUREAU OF ANATOMY.

A. C. ROLL, M. D., *Chairman*, Toledo
"The Prostate Gland."

THE PROSTATE GLAND.

BY ARTHUR C. ROLL, M.D., TOLEDO, O.

All life, from the lowest to the highest forms, has two objects to attain: first, nutrition or self-preservation; and second, reproduction. The prostate gland in man bears the same relation to the other organs of the body as the uterus does in woman. Health and happiness, or disease and misery, depend to a great extent, in man and woman, on the condition of the prostate gland in the one, or the uterus in the other.

Few physicians would hesitate to affirm the decided effect which the uterus has upon the health of the woman, and numberless reflexes are relieved by removing some uterine irritation. On the other hand, many men have been purged and otherwise badly treated for so-called dyspepsia and liver troubles without relief, when the true cause of their trouble might have been found and relieved by examining the prostate gland and prostatic urethra, and removing any abnormal conditions that is liable to be present there.

These organs represent the centers of reproduction in the two sexes, the same as the stomach represents the center of nutrition, and they are so closely allied together that when one has lost its normal equilibrium, it is almost sure to affect the other. The stomach, as the center of nutrition, gets all the attention in man; while the prostate gland, as the center of reproduction, is continually overlooked and abused. In woman the tendency has been to go to the other extreme.

Nutrition represents the selfish function of life, while reproduction represents the self-sacrificing function; nutrition is necessary to reproduction, but reproduction comes second in the category, and is, in my opinion, the highest of the two. It is a mistake in our system of education of the young to disregard reproduction, and devote so much time to nutrition, because without nutrition you cannot have reproduction, but without reproduction nutrition would be useless in one generation. To study anatomy and physiology with advantage, we must see both sides of the question, because if we do not our knowledge is incomplete, and worse than ignorance. It is time that parents and teachers threw aside false

modesty in reference to all questions which apply to reproduction, and give the young a thorough knowledge of that half of their nature, and by so doing much disease and unhappiness will be prevented.

In studying these two most important functions of life, and learning their close relationship, and seeing how they are dovetailed together, I have been led in the treatment of all obscure diseases of the male to investigate into the condition of the reproductive system, and I have been astonished to find how many cases are due to abnormal conditions in this part of the anatomy.

The prostate gland being the center of the reproductive system in the male, I will devote some attention, in this brief paper, to its anatomy. It is a firm, musculo-glandular mass, situated at the neck of the bladder, and surrounding the first part of the urethra. In the adult it is ordinarily about the size and shape of a large chestnut, but it is variable, and commonly enlarges after sixty years of age.

Its narrow end (the apex) is directed downwards and forward as far as the sub-public fascia; while the posterior, the larger portion (the base), is in close relation with the rectum, through which it can be readily felt by the finger when the bladder is partially distended, about two and one-half inches above the anus. It is surrounded by the vesico-prostatic plexes of veins, and is held in position by the pelvicfascia and by the levator-ani muscles anteriorly. Normally, the prostate measures transversely at the base about one and one-half inches, and vertically, in the direction of the urethra, about one inch.

To external appearances the prostate is one convex mass, but upon dissection it presents a lateral portion, or lobe on each side of the base, and a middle portion, included between the ejaculatory ducts and the neck of the bladder, the isthmus or middle lobe. The latter corresponds to the position of the uvula upon the vesicle surface, and when enlarged by old age or disease, often offers an obstruction to the flow of urine through the vesical orifice of the urethra. It should be understood, however, that this so-called middle lobe is ordinarily merely a connecting band between the lateral portions, and can properly be called a lobe only when hyper-

trophied. The prostate is ensheathed by the expansion of the recto-vesicle fascio, which contains the proper prostatic veins, as well as branches from the dorsal veins of the penis. In cases of hypertrophy of the glandular mass this capsule becomes thickened, and it is then possible to dissect it off and expose the substance of the organ. The unyielding nature of the capsule also serves to explain the severe pain in abscess of the prostate. The prostate consists principally of a mesh of unstripped muscle-fibers, continuous with the layers of the vesical walls, enclosing numerous small racenous glands which are congregated mostly in the posterior part. The muscle-fibers in front of the prostate are circularly disposed about the vesical orifices of the urethra, and assist in forming the vesical sphincter. In this relation it is sometimes called the internal prostatic sphincter to distinguish it from the external prostatic sphincter, the fibers of which are continuous with the membranous part of the urethra. The arteries of the prostate are relatively small, and are derived from the vesical, anterior, hemorrhoidal, and pubic arteries. The veins are larger and form the prostatic plexus at the sides. The nerves are from the hypogastric plexus of the sympathetic system, and a few medulated fibers possessing facinian corpuscles are formed on the surface of the organ. The lymphatics are numerous and large, and terminate in a lymphatic gland near the internal illiac vein. The prostatic glands are very numerous, constituting the chief bulk of the whole mass. They consist of a series of tubular alveoli which open into elongated excretory ducts, lined with columnar epithelium.

They are connected with one another by fibrous expansions from the external capsule, and surrounded by muscular tissue. The excretory ducts are arranged in sets corresponding to the lateral lobes, and to the middle lobe if it exists; and open into that part of the prostate portion of the urethra which is called the prostate sinuse. The prostatic fluid (liquor prostaticus) is a peculiar viscid secretion, much resembling an emulsion of gum arabic and water.

You can readily see how, situated as it is, and surrounding the commencement of the urethra for about one and one-fourth inches, and being so closely related to the vesical sphincters and also the

vesical seminales, that when it is out of order it will cause a good deal of trouble with the sympathetic nervous system. Phimoses, affecting the urethral orifice, will cause profound disturbance of the nervous system, but an enlarged or irritated prostate gland is capable, on account of its complicated structure and position, of doing much more damage to the general economy.

It is not within the province of this paper to take up the treatment of pathological conditions, but allow me to urge you in conclusion not to neglect paying attention to the condition of the reproductive system, even where only the nutritive system seems to be at fault in diseases of men as well as women.

CONSTITUTION.

ARTICLE I.

This Society shall be known as the HOMOEOPATHIC MEDICAL SOCIETY OF THE STATE OF OHIO; and its object shall be the advancement of medical science.

ARTICLE II.

Any physician of good moral character, who is a graduate of any legally constituted and reputable medical college, and who subscribes to the doctrine, *Similia Similibus Curantur*, may be elected a member of this Society, upon recommendation of the Board of Censors, by a vote of two-thirds of the members present at any annual meeting.

ARTICLE III.

Every member shall, upon admission, sign the Constitution and By-Laws, and pay the initiation fee.

ARTICLE IV.

Any non-resident physician, or such other person, resident or non-resident, as may be judged worthy, from his superior attainments in medicine or collateral branches, may be elected an honorary member by a vote of two-thirds of the members present at any annual meeting, and may participate in the proceedings of the Society, but shall not vote, and shall not be eligible to office.

ARTICLE V.

The officers of the Society shall consist of a President, two Vice-Presidents, a Secretary, Treasurer, and seven Censors, who shall be elected by ballot by a majority of the members present at any annual meeting; and who shall hold office until the adjournment of the annual meeting next after that at which they were elected, and until their successors are chosen and qualified.

ARTICLE VI.

It shall be the duty of the President to preside at all meetings of the Society, to preside over order, to put questions, announce decisions, and to name the members of committees not otherwise appointed.

ARTICLE VII.

It shall be the duty of the Vice-Presidents, in the order of their appointment, to discharge the duties of the President in his absence.

ARTICLE VIII.

It shall be the duty of the Secretary to give notice of the annual and other meetings of the Society, keep a record of the proceedings, conduct its correspondence, and have charge of its archives.

ARTICLE IX.

It shall be the duty of the Treasurer to receive all moneys, make all necessary disbursements, and report the same at the annual meeting.

ARTICLE X.

It shall be the duty of the Censors to receive all applications for membership, and to receive and to report to the Society upon the possession by the candidates of the qualifications required by the Constitution. Three members of the Board of Censors shall constitute a quorum.

ARTICLE XI.

The annual meeting of the Society, at which time its officers shall be elected, shall be held at such place as shall be designated in the By-Laws, on the second Tuesday in May of each year, and such other meetings shall be held as shall be ordered by the By-Laws.

ARTICLE XII.

Nine members of the Society shall constitute a quorum.

ARTICLE XIII.

Any article in this Constitution may be altered or amended by a vote of two-thirds of the members present at the annual meeting, provided that notice of each intended alteration or amendment shall have been given to the Society, when in session at the annual meeting next preceding.

B Y - L A W S .

SECTION 1. The annual meeting of the Society shall be held at such place as may be determined by a majority of the members at each regular meeting.

SEC. 2. The initiation fee shall be one dollar, and annual dues shall be two dollars, invariably in advance.

SEC. 3. At each annual meeting committees shall be appointed to report upon such subjects as the Society may designate.

SEC. 4. All communications read before the Society shall become its property; but no paper shall be published as a part of the transactions of the Society without its sanction.

SEC. 5. The regular order of business of each meeting shall be arranged by the President and Secretary.

SEC. 6. All papers presented to the Society may be read by synopsis or in full, not to exceed ten minutes, except the Chairman's, which may have fifteen. Discussions shall be limited to five minutes to each speaker, and no person shall speak more than twice on the same paper. Each paper shall be offered for discussion immediately after its reading.

SEC. 7. These By-Laws may be altered or amended at any regular meeting, by a vote of a majority of the members present.

STANDING RESOLUTIONS.

Resolved, That we do not deem it best to issue certificates of qualifications to any person or persons except they be already members of this Society, but would refer all such cases to local, county or congressional district societies.

Adopted June 9, 1868.

Resolved, That hereafter no paper shall be published with the proceedings of this Society, the substance of which, at least, has not been addressed to the Society.

Adopted May 11, 1870.

Resolved, That all members of the Society who shall remove from the State, shall remain members of the Society only on the payment of dues up to the time of removal, after suitable notice.

Resolved, That all members of the Society, non-residents of the State, shall be exempt from all financial obligations to the Society.

Adopted May 14, 1873.

Resolved, That hereafter when any member becomes in arrears for three years, his name shall be stricken from the list of members, after due notice. No member in arrears shall receive a copy of the Transactions.

Resolved, That such members may be restored to the list upon payment of arrearage to date of restoration.

Adopted May 12, 1875.

Resolved, That the Secretary and Treasurer of this Society shall not, during incumbency, be required to pay annual dues.

Adopted May 14, 1890.

OFFICERS OF THE SOCIETY.

SINCE ITS ORGANIZATION, 1864.

1865.

President—A. O. Blair, M. D., Cleveland.
 First Vice-President—E. C. Witherill, M. D., Cincinnati.
 Second Vice-President—W. Webster, M. D., Dayton.
 Third Vice-President—A. C. Barlow, M. D., Lancaster.
 Secretary—C. Cropper, M. D., Cincinnati.
 Treasurer—G. H. Blair, M. D., Columbus.

1866.

President—Lewis Barnes, M. D., Delaware.
 First Vice-President—J. Bosler, M. D., Dayton.
 Second Vice-President—A. Shepherd, M. D., Glendale.
 Secretary—E. P. Penfield, M. D., Bucyrus.
 Treasurer—C. C. White, M. D., Columbus.

1867.

President—D. H. Beckwith, M. D., Cleveland.
 First Vice-President—Geo. H. Blair, M. D., Columbus.
 Second Vice-President—H. S. Barbour, M. D., Galion.
 Secretary—W. Webster, M. D., Dayton.
 Treasurer—C. C. White, M. D., Columbus.

1868.

President—J. Bosler, M. D., Dayton.
 First Vice-President—G. H. Blair, M. D., Columbus.
 Second Vice-President—E. C. Beckwith, M. D., Zanesville.
 Secretary—A. Shepherd, M. D., Glendale.
 Treasurer—C. C. White, M. D., Columbus.

1869.

President—W. Webster, M. D., Dayton.
 First Vice-President—E. L. Flowers, M. D., New Lexington.
 Second Vice-President—A. Shepherd, M. D., Glendale.
 Secretary—T. P. Wilson, M. D., Cleveland.
 Treasurer—C. C. White, M. D., Columbus.

1870.

President—E. B. Thomas, M. D., Cincinnati.
 First Vice-President—S. S. Lungren, M. D., Toledo.
 Secretary—T. P. Wilson, M. D., Cleveland.
 Treasurer—C. C. White, M. D., Columbus.

1871.

President—E. C. Beckwith, M. D., Zanesville.
First Vice-President—W. Webster, M. D., Dayton.
Second Vice-President—Lewis Barnes, M. D., Delaware.
Secretary—H. H. Baxter, M. D., Cleveland.
Treasurer—J. C. Sanders, M. D., Cleveland.

1872.

President—T. P. Wilson, M. D., Cleveland.
First Vice-President—M. H. Slosson, M. D., Dayton.
Second Vice-President—J. M. Parks, M. D., Hamilton.
Secretary—H. H. Baxter, M. D., Cleveland.
Treasurer—J. C. Sanders, M. D., Cleveland.

1873.

President—S. S. Lungren, M. D., Toledo.
First Vice-President—J. D. Buck, M. D., Cincinnati.
Secretary—H. H. Baxter, M. D., Cleveland.
Treasurer—J. C. Sanders, M. D., Cleveland.

1874.

President—J. D. Buck, M. D., Cincinnati.
First Vice-President—J. H. Coulter, M. D., Columbus.
Second Vice-President—G. J. Jones, M. D., Grafton.
Secretary—H. H. Baxter, M. D., Cleveland.
Treasurer—J. C. Sanders, M. D., Cleveland.

1875.

President—J. R. Flowers, M. D., Columbus.
First Vice-President—C. C. White, M. D., Columbus.
Second Vice-President—W. M. Detweiler, M. D., Findlay.
Secretary—W. A. Phillips, M. D., Cleveland.
Treasurer—J. C. Sanders, M. D., Cleveland.

The following year, 1876, being the Centennial, and the profession being largely occupied with the World's Convention, which met in Philadelphia, no session of the Society was held.

1877.

President—W. M. Detweiler, M. D., Findlay.
First Vice-President—R. B. Rush, M. D., Salem.
Second Vice-President—Wm. Owens, M. D., Cincinnati.
Secretary—W. A. Phillips, M. D., Cleveland.
Treasurer—J. C. Sanders, M. D., Cleveland.

1878.

President—J. B. Hunt, M. D., Delaware.
First Vice-President—H. H. Baxter, M. D., Cleveland.
Second Vice-President—E. P. Gaylord, M. D., Cleveland.
Secretary—A. N. Ballard, M. D., (pro tem, Shelby.
Treasurer—J. C. Sanders, M. D., Cleveland.

1879.

President—H. H. Baxter, M. D., Cleveland.
 First Vice-President—E. P. Gaylord, M. D., Toledo.
 Second Vice-President—Wm. Owens, M. D., Cincinnati.
 Secretary—H. M. Logee, M. D., Oxford.
 Treasurer—J. C. Sanders, M. D., Cleveland.

1880.

President—E. P. Gaylord, M. D., Toledo.
 First Vice-President—Wm. Owens, M. D., Cincinnati.
 Second Vice-President—E. Gillard, M. D., Sandusky.
 Secretary—J. A. Gann, M. D., Wooster.
 Treasurer—J. C. Sanders, M. D., Cleveland.

1881.

President—H. M. Logee, M. D., Oxford.
 First Vice-President—M. H. Parmelee, M. D., Toledo.
 Second Vice-President—G. W. Moore, M. D., Springfield.
 Secretary—H. E. Beebe, M. D., Sidney.
 Treasurer—J. C. Sanders, M. D., Cleveland.

1882.

President—Wm. Owens, M. D., Cincinnati.
 First Vice-President—E. Van Norman, M. D., Springfield.
 Second Vice-President—C. C. White, M. D., Columbus.
 Secretary—H. E. Beebe, M. D., Sidney.
 Treasurer—J. C. Sanders, M. D., Cleveland.

1883.

President—C. C. White, M. D., Columbus.
 First Vice-President—C. E. Walton, M. D., Hamilton.
 Second Vice-President—W. A. Phillips, M. D., Cleveland.
 Secretary—H. E. Beebe, M. D., Sidney.
 Treasurer—J. C. Sanders, M. D., Cleveland.

1884.

President—J. C. Sanders, M. D., Cleveland.
 First Vice-President—J. P. Geppert, M. D., Cincinnati.
 Second Vice-President—M. P. Hunt, M. D., Delaware.
 Secretary—H. E. Beebe, M. D., Sidney.
 Treasurer—William T. Miller, M. D., Cleveland.

1885.

President—R. B. Rush, M. D., Salem.
 First Vice-President—G. C. McDermott, M. D., Cincinnati.
 Second Vice-President—E. R. Eggleston, M. D., Mt. Vernon.
 Secretary—H. E. Beebe, M. D., Sidney.
 Assistant Secretary—S. P. Geiser, M. D., Cincinnati.
 Treasurer—William T. Miller, M. D., Cleveland.

1886.

President—H. E. Beebe, M. D., Sidney.
First Vice-President—A. Claypool, M. D., Toledo.
Second Vice-President—O. D. Childs, M. D., Akron.
Secretary—C. E. Walton, M. D., Hamilton.
Assistant Secretary—H. A. Chase, M. D., Toledo.
Treasurer—William T. Miller, M. D., Cleveland.

1887.

President—A. Claypool, M. D., Toledo.
First Vice-President—J. W. Clemmer, M. D., Columbus.
Second Vice-President—R. N. Warren, M. D., Wooster.
Secretary—C. E. Walton, M. D., Hamilton.
Assistant Secretary—C. L. Cleveland, M. D., Cleveland.
Treasurer—H. Pomeroy, M. D., Cleveland.

1888.

President—N. Schneider, M. D., Cleveland.
First Vice-President—E. R. Eggleston, M. D., Mt. Vernon.
Second Vice-President—J. A. Gann, M. D., Wooster.
Secretary—C. D. Walton, M. D., Hamilton.
Assistant Secretary—M. B. Hunt, M. D., Cleveland.
Treasurer—H. Pomeroy, M. D., Cleveland.

1889.

President—C. E. Walton, M. D., Hamilton.
First Vice-President—C. L. Cleveland, M. D., Cleveland.
Second Vice-President—Frances G. Derby, M. D., Cleveland.
Secretary—Frank Kraft, M. D., Sylvania.
Assistant Secretary—C. D. Crank, M. D., Cincinnati.
Treasurer—H. Pomeroy, M. D., Cleveland.
Necrologist—D. H. Beckwith, M. D., Cleveland.

1890.

President—John A. Gann, M. D., Wooster.
First Vice-President—Orpha D. Baldwin, East Portland, Oregon.
Second Vice-President—C. A. Pauly, M. D., Cincinnati.
Secretary—Frank Kraft, M. D., Sylvania.
Assistant Secretary—C. C. True, M. D., Cleveland.
Treasurer—H. Pomeroy, M. D., Cleveland.
Necrologist—D. H. Beckwith, M. D., Cleveland.

1891.

President—E. R. Eggleston, M. D., Cleveland.
First Vice-President—O. A. Palmer, M. D., Warren.
Second Vice-President—O. D. Childs, M. D., Akron.
Secretary—R. B. House, M. D., Springfield.
Assistant Secretary—T. G. Barnhill, M. D., Findlay.
Treasurer—C. D. Ellis, M. D., Cleveland.
Necrologist—D. H. Beckwith, M. D., Cleveland.

OFFICERS SINCE ORGANIZATION.

1892.

President—C. D. Crank, M. D., Cincinnati.
 First Vice-President—M. H. Parmelee, M. D., Toledo.
 Second Vice-President—T. G. Barnhill, M. D., Findlay.
 Secretary—Thos. M. Stewart, M. D., Cincinnati.
 Assistant Secretary—S. R. Geiser, M. D., Cincinnati.
 Treasurer—C. D. Ellis, M. D., Cleveland.
 Necrologist—D. H. Beckwith, M. D., Cleveland.

1893.

President—M. H. Parmelee, M. D., Toledo.
 First Vice-President—H. B. Van Norman, M. D., Cleveland.
 Second Vice-President—S. R. Geiser, M. D., Cincinnati.
 Secretary—Thos. M. Stewart, M. D., Cincinnati.
 Assistant Secretary—A. C. Roll, M. D., Toledo.
 Treasurer—R. B. House, M. D., Springfield.
 Necrologist—D. H. Beckwith, M. D., Cleveland.

1894.

On account of the World's Fair at Chicago, Ill., in 1893, no meeting of the society was held in Ohio. The officers elected for the previous year were therefore retained, and the Homeopathic Medical Society of Ohio attended the sessions of the World's Congress of Homeopathic Physicians and Surgeons held in Chicago May 24 to June 3, 1893.

1895.

President—R. B. House, M. D., Springfield.
 First Vice-President—Wm. Watts, M. D., Toledo.
 Second Vice-President—W. C. Hastings, M. D., Van Wert.
 Secretary—Thos. M. Stewart, M. D., Cincinnati.
 Assistant Secretary—Frank Kraft, M. D., Cleveland.
 Treasurer—T. T. Church, M. D., Salem.
 Necrologist—D. H. Beckwith, M. D., Cleveland.

1896.

President—W. A. Phillips, M. D., Cleveland.
 First Vice-President—Thos. M. Stewart, M. D., Cincinnati.
 Second Vice-President—Emma L. Boice, M. D., Toledo.
 Secretary—A. C. Roll, M. D., Toledo.
 Assistant Secretary—J. C. Fahnestock, M. D., Piqua.
 Treasurer—T. T. Church, M. D., Salem.
 Necrologist—D. H. Beckwith, M. D., Cleveland.

MEMBERS.

NAMES.	LOCATION.	ADMITTED.
Allen, Geo. E.,	Youngstown, 26 West Federal Street,	1888
Allen, H. C. (Honorary),	Chicago, Ill., 1542 Washington Avenue,	1883
Ames, C. S.,	Ada,	1894
Baker, De F.,	Cleveland, 106 Euclid Avenue,	1879
Baldwin, Orpha D.,	Portland, Ore.,	1887
Ballard, A. N.,	Birmingham, Ala.,	1877
Banning, Carina B. C., B. S.,	Willoughby,	1895
Banning, Edward P.	Willoughby,	1895
Barlow, A. C.,	Toledo, 410 Superior Street,	1865
Barnhill, T. G.,	Findlay,	1875
Baxter, H. H.,	Cleveland, 271 Prospect Street,	1868
Beckwith, D. H.,	Cleveland, 528 Prospect Street,	1864
Beckwith, S. R.,	East Orange, N. J.,	1864
Beebe, H. E.,	Sidney,	1873
Biggar, H. F.,	Cleveland, 166 Euclid Avenue,	1867
Bishop, H. D.,	Cleveland, 89 Euclid Avenue,	1894
Bissell, Geo. R.,	Columbus, 835 Franklin Avenue,	1892
Blackburn, W. J.,	Salem,	1895
Blinn, J. C.,	Chesterville,	1890
Boice, Emma L.,	Toledo, corner Monroe and 23d Streets,	1888
Bradford, T. C.,	Cincinnati, 315 Race Street,	1864
Bradley, B. A.,	Cincinnati, Wallace Avenue, Avondale,	1882
Brainard, J. E.,	Perrysburg,	1892
Brenizer, N. O.,	Austin, Tex.,	1888
Brickley, Laura C.,	Harrison,	1888
Buck, Edgar C.,	Cincinnati, 124 West Seventh Street,	1892
Buck, J. D.,	Cincinnati, 124 West Seventh Street,	1869
Buell, A. C.,	Cleveland, 76 Euclid Avenue,	1885
Buell, E. C.,	California,	1877
Campbell, M. Elizabeth,	Toledo,	1894
Canfield, M. A.,	Cleveland, 24 Streator Avenue,	1877
Carpenter, W. B.,	Columbus, 657 North High Street,	1888
Carter, H. W.,	Cuyahoga Falls,	1871
Carter, J. T.,	Cleveland, 106 Euclid Avenue,	1890
Carter, R. B.,	Akron,	1887
Champlin, H. D.,	Cleveland, 455 Clark Avenue,	1887
Chapman, E. K.,	Defiance,	1894
Childs, O. D.,	Akron,	1885
Church, T. T.,	Salem, 70 East Main Street,	1886
Clark, G. E.,	Stillwater, Minn.,	1883
Claypool, Albert,	Toledo, 711 Madison Street,	1877
Clemmer, J. W.	Columbus, 238 East State Street,	1884
Coffeen, C. R.,	Piqua,	1882
Cole, Perry A.,	Cleveland, 417 Superior Street,	1890

NAMES.	LOCATION.	ADMITTED.
Conrad, C. K.,	Mt. Vernon,	1894
Cook, J. H.,	New Carlisle,	1892
Countryman, A. M.,	Cincinnati, 1475 Eastern Avenue,	1889
Crank, C. D.,	Cincinnati, 231 Auburn Avenue,	1877
Cranz, D. E.,	Akron,	1886
Crawford, J. M.,	St. Petersburg, Russia,	1884
Crismore, Jas. M.,	Helena,	1886
Croft, W. B.,	Medina,	1884
Cummer, R. J.,	Cleveland, Clarence Building,	1895
Curtis, H. N.,	Marietta,	1895
Curtis, H. W. (Honorary),	Chagrin Falls,	1867
Cushing, C. F.,	Elyria,	1868
Damon, G. J.	Medina,	1891
Darby, E. A.,	St. Paul, Minn., 296 Endicott Arcade,	1894
Deetrick, J.,	Youngstown,	1887
Denison, Mary E.,	Toledo, Woodruff Avenue,	1894
Dillman, D.,	Cleveland, 94 Starr Avenue,	1890
Dudley, Mrs. Maurice,	Covington, Ky., Greenup St., bet. 4th and 5th,	
Duncan, T. C., (Honorary),	Chicago, Ill., 100 State Street,	1881
Eaton, M. M., Jr.,	St. Louis, Mo.,	1892
Edgar, S. F.,	Zanesville,	1874
Ehrman, Geo. B.,	Cincinnati, 46 West Seventh Street,	1889
Eggleson, E. R.,	Ann Arbor, Mich., 29 E. Jefferson Street,	1877
Eisenhauer, J. A.,	Cleveland, 113 Scoville Avenue,	1885
Ellis, C. D.,	Cleveland, 433 Pearl Street,	1890
Ellis, J. T.,	Waynesville,	1885
Evelyn, R. S.,	Cleveland, 526 Prospect Street,	1892
Fahnestock, J. C.,	Piqua, 510 North Main Street,	1882
Fawcett, J. M.,	Wheeling, W. Va., cor. Market and 7th Streets,	1892
Ferris Jacob,	College Hill,	1889
Flowers, F. L., (Honorary),	Lancaster,	1864
*Flowers, J. R.,	Columbus, 246 East Town Street,	1880
Forward, C. B.,	Cleveland, 176 Euclid Avenue,	1895
Fowler, E.,	Cleveland, 1430 Broadway,	1868
Freeman, E. R.,	Wapakoneta,	1887
Frost, W. A.,	Tecumseh, Mich.,	1881
Gann, J. A.,	Wooster,	1877
Gaylord, Wm.,	Sandusky,	1885
Geiser, S. R.,	Cincinnati, 1511 Baymiller Street,	1890
Geohegan, Wm. A.,	Cincinnati, Hawthorne Avenue, Price Hill,	1889
Gifford, W. H.	Cleveland, 20 Cedar Avenue,	1895
Gillard, Edwin,	Sandusky, 725 Washington Row,	1875
Ginn, C. F.,	Miamisburg,	1882
Goodwin, E. M.,	Toledo, 229 Superior Street,	1872
Grant, Geo. D.,	Springfield,	1881
Graybill, J. D. (Honorary),	Shreveport, La., 828 Cotton Street,	1882
Gregory, W. M.,	Berea,	1895
Griffin, C.	Clyde,	1886
Griggs, O. P.	Ashtabula, 207 Main Street,	1885

* Deceased.

NAMES	LOCATION.	ADMITTED.
Hall, Charles A.,	Cleveland, 176 Euclid Avenue,	1895
Hall, E. M.,	Delaware,	1873
Hammer, A. J.	Toledo, 917 Broadway,	1892
Hanlin, W. H.	Middleport,	1892
Hart, F. O.,	West Unity,	1886
Hartshorn, D. W.,	Cincinnati, 168 West Ninth Street,	1871
Harvey, J. W.,	Toledo, Darst Block,	1894
Hastings, W. C.,	Van Wert,	1887
Hatch, H. S.,	Madison, Ind.,	1892
Hayden, A. S.,	Salem,	1884
Hershberger, J. P.	Lancaster,	1887
Hills, H. B.,	Youngstown, 21 West Wood Street,	1889
Hinsdale, W. B.,	Ann Arbor, Mich.,	1890
Holiday, Elwood,	West Elkton,	1886
House, R. B.,	Springfield, 108 East High Street,	1881
Houston, H. C.,	Urbana,	1882
Howard, Elmira Y.,	Cincinnati, Henrietta Building,	1871
Howells, Martha M.,	Hartwell,	1880
Hoyt, C.,	Chillicothe, 39 South Paint Street,	1882
Hoyt, Wm.,	Hillsboro,	1871
Hunt, M. P.,	Columbus, The Ruggery,	1881
Hunt, Stella,	Cincinnati, 262 Kemper Lane,	1889
Jackson, W. S.,	Bucyrus,	1891
Jewitt, E. H.,	Cleveland, 106 Euclid Avenue,	1887
Johnson, R. B.,	Ravenna,	1869
Johnson, T. M.,	Lima,	1891
Jones, G. J.,	Cleveland, 5 Rockwell Street,	1873
Jump, Julia C.,	Oberlin,	1892
Keelor, Jasper G.,	Cincinnati, 100 West Seventh Street,	1895
Kersey, J. B.,	Bond Hill,	1892
Kilgour, P. T.,	College Hill,	1892
King, John C.,	Banning, Cal.,	1883
King, J. H.,	Ashland,	1895
Kinsell, D. R.,	Columbus, 134 East State Street,	1864
Kirk, Ellen M.,	Cincinnati, 169 West Seventh Street,	1880
Kirkland, W. H.,	Massillon,	1887
Kraft, Frank,	Cleveland, 57 Bell Avenue,	1888
Kurt, Katherine,	Akron,	1895
Layton, J. Geo.,	Cleveland, 2153 Superior Street,	1895
Lemmon, Mary F.,	Cadiz,	1894
Leronge, L.,	Cleveland, 5 Euclid Avenue,	1894
Linn, T. E.,	Ashville, N. C.,	1889
Livermore, F. B.,	Cleveland, 176 Euclid Avenue,	1895
Logee, H. M.,		1877
Loomis, F. R.,	Jefferson,	1886
Lounsbury, O. W.,	Wyoming,	1873
Lunger, J. S.,	Prospect,	1894
Martin, T. C.,	Cleveland, 791 Prospect Street,	1887
Marvin, J. J.,	Pleasant Ridge,	1878
Maxwell, L. K.,	Toledo, 2208 Monroe Street,	1891

NAMES.	LOCATION.	ADMITTED.
Meade, S. J. D.,	Cincinnati, 45 Everett Street,	1889
Means, J. W.,	Troy,	1886
Metzger, Charles,	Lima, 215 South Main Street, - - -	1884
McClure, A. E.,	Lakewood,	1895
McCormick, A. L.,	Cincinnati, 130 Woodburn Ave., Walnut Hills,	1885
McDermott, G. C.,	Cincinnati, Odd Fellows Temple,	1880
McGranaghan, W. H.,	Youngstown,	1896
McTaggart, D. C.,	Bryan,	1894
Meader, Lee Douglas,	Cincinnati, 100 West Seventh Street,	1896
Merriam, W. B.,	Cleveland, Huron Street Hospital,	1895
Miller, H. T.,	Springfield, 113 East High Street,	1895
Miller, John M.,	Springfield, 113 East High Street,	1882
Miller, Wm. T.,	Cleveland, 168 Huron Street,	1879
Mitchell, J. A.,	Newark,	1886
Monroe, A. L. (Honorary),	Louisville, Ky.,	1889
Morley, F. W.,	Sandusky,	1890
Morrill, E. C.,	Norwalk,	1877
Morrison, F. A.,	Rock Creek,	1890
Munns, C. O.,	Oxford,	1885
Murdoch, Wm.,	Akron,	1877
Neibling, W. C.,	Findlay,	1891
Norris, J. C.		1886
Olmsted, C. C., (Honorary),	Kansas City, Mo.,	1864
Outland, W. H.,	Zanesfield,	1882
Overpeck, J. W.,	Hamilton, cor. Third and Dayton Streets,	1892
Owens, J. B.,	Los Angeles, Cal.,	1864
Owens, Wm.,	Cincinnati, cor. Seventh and John Streets,	1871
Palmer, I. N.,	Newark,	1892
Palmer, O. A.,	Warren,	1888
Parmelee, M. H.,	Toledo, 1717 Jefferson Street,	1872
Pauly, C. A.,	Cincinnati, Odd Fellows Temple,	1888
Peters, Wilson L.,	Nebraska,	1895
Phillips, Lincoln,	Hartwell,	1892
Phillips, W. A.,	Cleveland, 29 Euclid Avenue,	1879
Pomeroy, H.,	Cleveland, 116 Ingleside Avenue,	1884
Porter, Phil.,	E. Detroit, Mich., 38 Adams Avenue,	1888
Pratt, E. H. (Honorary),	Chicago, Ill., Central Music Hall,	1889
Quay, Geo. H.,	Cleveland, 122 Euclid Avenue,	1885
Reddish, A. W.,	Sidney,	1883
Reed, R. G.,	Bellefontaine,	1892
Rees, Owen C.,	Toledo, 314 Erie Street,	1892
Rhonehouse, G. W.,	Maumee,	1886
Ring, Chas. F.		1885
Robb, Isaac,	Cincinnati, 161 West Seventh Street,	1889
Robinson, Emily,	Cleveland, 2238 Euclid Avenue,	1892
Roll, A. C.,	Toledo, 913 Huron Street,	1892
Roper, P. B.,	Cleveland, 53 Bolivar Street,	1895
Rorich, F. H.,	Chicago, Ill.,	1886
Rosenberger, A. S.,	Covington,	1889

NAMES.	LOCATION.	ADMITTED.
Rush, R. B.,	Salem, 70 East Main Street,	1868
Rust, Carl,	Wellington,	1895
Rust, E. G.,	Wellington,	1887
Salisbury, S. S.	Los Angeles, Cal.,	1877
Sanders, J. C.,	Cleveland, 608 Prospect Street,	1864
Sanders, J. Kent,	Cleveland, 106 Euclid Avenue,	1884
Sawyer, C. E.,	Marion, 625 South Main Street,	1883
Scheble, A. E.,	Toledo, 228 Twelfth Street,	1894
Scheble, M. M.,	Ashley,	1895
Scheib, J. Phil.,	Indianapolis, Ind.,	1892
Schneider, Adolph. B.,	Cleveland, 329 Jennings Avenue,	1895
Schneider, J.,	Cleveland, 44 Harbor Street,	1892
Schappee, W. A.,	Xenia,	1889
Sherwood, H. A.,	Warren,	1877
Sheets, C. A.,	St. Marys,	1881
Sigrist, P. H.,	New Philadelphia, 132 East High Street,	1895
Simmons, H. B.,	Bellefontaine,	1895
Snow, Henry,	Norwood, Cincinnati,	1892
Somers, Frank W.,	Cleveland, 1545 Lorain Street,	1895
Spicer, J. H.,	Whitehouse,	1892
Steddom, Chas.,	Monroe,	1892
Steingraver, F. C.,	Bluffton,	1888
Stephens, J. A.,	Cleveland, 122 Euclid Avenue,	1884
Stewart, Thos. M.,	Cincinnati, 266 Elm Street,	1888
Stoner, J. W.,	North Baltimore,	1891
Strong, C. H.,	Toledo, cor. Superior and Adams Streets,	1891
Sturtevant, L. P.,	Conneaut,	1879
Sutphin, J. T.,	Middletown,	1871
Thomas, E. P.,	Bowling Green,	1894
Thomas, W. B.,	Cleveland, 1501 Wilson Avenue,	1895
Thompson, Jno. A.,	McComb,	1894
Thorp, Abner,	Cincinnati, cor. Ninth and Vine Streets,	1887
Thorpe, S. L.,	Cleveland, 106 Euclid Avenue,	1887
Tims, W. A.,	Cleveland, 176 Euclid Avenue,	1888
Trego, W. E.,	Delaware,	1894
Tritch, J. C.,	Findlay, 232½ South Main Street,	1894
True, C. C.,	Cleveland, 106 Euclid Avenue,	1885
Turrill, Geo. E.,	Cleveland, 176 Euclid Avenue,	1894
Vance, J. W.,	Madison, Wis.,	1878
Van Norman, E. V.,	San Diego, Cal., cor. Sixth and C Streets,	1871
Van Norman, H. B.,	Cleveland, 289 Pearl Street,	1865
Viets, B. B.,	Cleveland, 176 Euclid Avenue,	1886
Waddell, Flora A.,	Wauseon,	1886
Waite, Kent B.,	Cleveland, 176 Euclid Avenue,	1890
Walter, Z. D.,	Marietta,	1872
Walton, C. E.,	Cincinnati, cor. Seventh and John Streets,	1880
Warren, R. N.,	Wooster,	1879
Watts, Wm.,	Toledo, 339 Huron Street,	1881
Webster, Frank,	Dayton,	1895
Webster, William Herr,	Dayton,	1895

MEMBERS.

NAMES.	LOCATION.	ADMITTED.
Wells, T. E.,	Cardington,	1886
Wells, W. E.,	Cleveland, 433 Pearl Street,	1890
Wesco, A. J.,	Seven Mile,	1892
White, F. R. Smith,	Cardington,	1892
Whitehead, J. H.,	Bowling Green,	1877
Wiggers, H. H.,	Cincinnati, 95 Everett Street,	1892
Wilder, Guert E.,	Sandusky,	1895
Wilson, J. H.,	Bellefontaine,	1867
Wilson, T. P. (Honorary),	Cleveland, 106 Euclid Avenue,	1864
Williams, J. W.,	Weston,	1886
Williams, W. L.,	Cincinnati, Woodburn Ave., Walnut Hills,	1889
Winship, Annette T.,	Cleveland, 525 Prospect Street,	1895
Wood, James C.,	Cleveland, 122 Euclid Avenue,	1894
Wright, N. E.,	Berea,	1879
Wunderlich, E. J.,	Cleveland, 493 Scoville Avenue,	1884
Wyant, Ira L.,	Chester Cross Roads,	1895
Younghusband, L. (Honorary),	Detroit, Mich., 79 Elizabeth W.,	1890
Zbinden, Christian,	Toledo, 431 Nebraska Avenue,	1894
Zimmerman, Geo.,	Fremont,	1887
Zink, H. F.,	Clarington,	1887

MEMBERS RESIGNED.

Goodman, Julia M.,
Hitchcock, Lena E.,

Ireland, G. M.,
Linkmyer, M. Belle,

Parsons, Kate,
Schell, F. H.,